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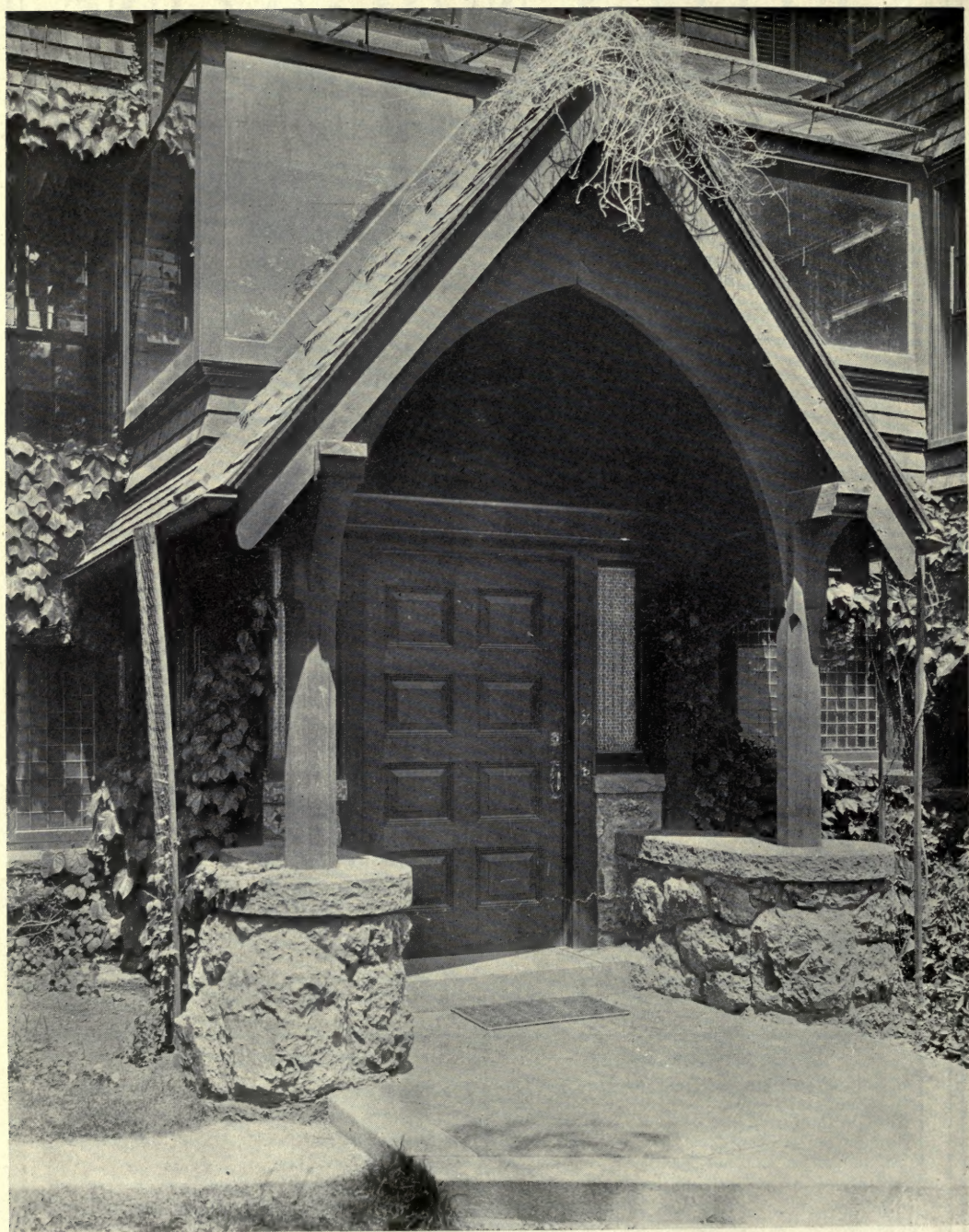
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AN ENTRANCE WITH GOTHIC MOTIF.

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No. 1



THE GENERAL QUIET LINES OF THE DESIGN.

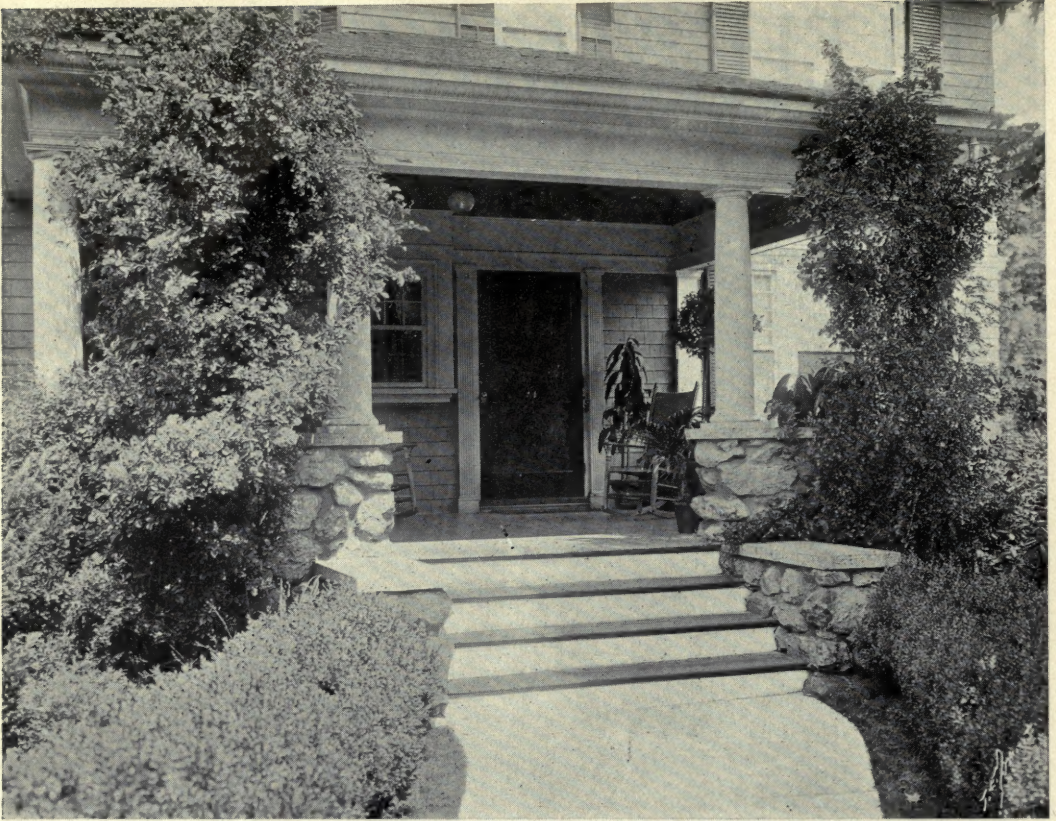
The Relation of the Entrance to the Dwelling

By Laurence B. Clapp



HERE has been a new birth of interest in architecture and in the principles of architectural design during the last few years such as the world has seen only a few times in its history. The object of this

article is not to give a review of this great movement, but to suggest certain ways in which it has affected this one subject, e. g., "entrances." America the "Melting Pot"—more than any other country has been inspired and guided by



THE EXPRESSION OF QUIET HOME LIFE.

this growing artistic development. "An enthusiasm for the good work of the past is the necessary accomplishment of every rebirth, of every renaissance of art and culture. We are the transplanted heirs to all the art past of our race, while our new conditions of life have evolved new creeds and new opportunities." As a further word of introduction to this subject of "entrances" let me state that it is one of the most vital not only to the student of architecture, but to the layman, the man who intends to build,—to have a house or building of his own.

What could be a more important or salient feature of an architectural composition than the entrance, for the word entrance signifies a "leading into" (not only in an architectural sense, but in a more general synthetic sense) from the exterior to the interior. Particularly does the

word "entrance" apply to our domestic architecture, for it is the entrance of the house that gives it its character both in a historical and spiritual sense. Again the word "entrances" signifies the transition between the outer and the inner—the exclusive and the inclusive.

The accompanying photographs are those of domestic architecture and I shall therefore deal with the subject of entrances as applied to houses.

First of all the entrance to a house should be expressive. It should be an integral part of the structure. Our eyes are a part of the face—a part of the structure—and yet truly—the entrances to the soul—the real home of the human structure. By an integral part of the whole I mean this: the entrance whether a door, porch, steps or facade, is built into the structure, it is all a part of the

door or entrance treatment. A pergola, e. g., a row of columns supporting horizontal beams, trellises, etc., is extended to a building—too often tacked to it—but it is not an entrance in the true and vital sense of the word. Again on this same point—the entrance as an integral part of the building—note in the photograph how

least three ways: by simplicity, attractiveness, and dignity.

By simplicity I mean more than "beauty unadorned." The entrances shown in photo No. 1 and No. 2 admirably illustrates this point. Note in photograph Number 1 the treatment of the entrance. The porch or veranda is



WELL PROPORTIONED CORNICE AND ARCHITRAVE.

each porch is built around the entrance—or the door treatment. The porch in each case is a part of the composition—the door proper is only a part of the entrance unit—or, if you please, the entrance. In each example the entrance includes the door, the porch, steps, decorative features, the foliage, etc. Thus we obtain composition or the grouping of different units to form a composite whole.

Now how is this accomplished? In at

omitted and in its place is designed the portico. Its style of architecture is very different from those of the other photographs. It represents renaissance with a slight feeling of Gothic. The general treatment is that of straight lines and a thoughtful discarding of "gingerbread" ornament. The skillful handling of the sun-porch above the portico—making the design of the entrance and porch above one—is another striking feature. The

design especially expresses the thought put upon the problem. Instead of classical mouldings and detail we see the simple cutting and carving of the wood. The posts supporting the portico, the brackets at the top of the posts, the stone ramps beneath the posts, all these are interesting studies. The whole entrance is simple and yet there is the very strength

These entrances exemplify the life of the people; as the people were simple in the early days—so were the doorways and entrances. However, it is because of this expressive simplicity that we find the wonderful charm in these types of domestic architecture.

Secondly, how may an entrance be made attractive or "charming"? First of



THE DIGNITY OF CLASSIC DESIGN.

of the design. In photo No. 2 note the graceful contour of the porch, roof and the general quiet lines of the design, the simple shingle treatment of walls and porch railing. The doorway is quiet and unobtrusive, and yet there is a snugness to the entrance and an expression of quiet home life in the whole composition. Some of the best examples of simple entrances, as of simple houses, are those found along the Maine coast, but particularly in the little towns of Massachusetts, such as those along the valley of the Connecticut.

all by making it architecturally correct, e. g., preserving a true proportion of scale and composition. This is illustrated by the proportion of the cornices and architraves of the porches in illustrations numbers 3, 4 and 5. To classic proportion, however, must be added that elusive element called "charm." This is largely gained not only by decorative features, such as the use of columns, mouldings, porticos, carving, etc., but by the grouping of furniture on the porch (or at the door if the porch is omitted),

and the artistic draping of vines and shrubbery. Especial attention is called to photographs numbers 3 and 4.

The entrance should also convey a sense of hospitality, a feeling of "tarry and bide a wee" and to do so it must, as I have said, be an integral part of the building with an attractiveness which is in itself an invitation.

The use of color is now playing an important part in the treatment of our modern entrances; such as the use of leaded and stained glass in the doors and the side lights, the staining of woods, as shown in photographs Nos. 1 and 2, the use of variegated brick, and the contrast between the different kinds of building materials.

Thirdly, how may an entrance be made dignified? In general by the intelligent following out of precedent, the adaptation of the classical orders, and the

real sensing of proportion as applied to design. The classical treatment of entrances is seen mainly in the Colonial homes grouped around New England, the South, and Pennsylvania. The classical detail and proportion of these have hardly been excelled even in our modern times. Take, for instance, the reposeful dignity of the entrance portico shown in photo No. 5. Here simplicity and dignity are expressed by the use of the Corinthian columns, caps, cornice and the horizontal lines of the front of the house.

To sum up, an entrance should be so designed as to be simple, attractive and dignified. The use of simple motives, the proportion of detail, the eliminating of lavish and meaningless ornament, adornment by the aid of vines, foliage, and shrubbery, all these add to what is essential to the true intent and the true expression of the word "entrance" as applied to architecture.

Electricity in the Twentieth Century House

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D.

(John Hopkins)



MR. EDISON has perfected a combination of gasoline engine, generator, and storage batteries by which, for a modest expense, every man can make his own electricity in his own cellar, utterly and for all time independent of the nearness or farness of the big electrical companies.

He can buy a farm in the Middle West or New England and can be as free of worries over lighting and heating as if he were a householder on Forty-second street, New York. He can erect a tent in the desert, if he is so minded, and still read himself to sleep at night under a

convenient electrical chandelier, and shave himself the next morning with water heated on an electrical stove.

He can travel so far from the haunts of men that nothing remains to him of their memory, but he cannot, unless he deliberately wills it, find a darkness that Mr. Edison has not given him means to overcome.

A practical demonstration of the truth of these things is now being made public by Mr. Edison at Llewellyn Park, West Orange, N. Y., in a house not far from his home.

There he has installed a complete

equipment for the generation and storage of electricity, and has filled the house with electrical devices for proving the practicability of his little plant in the daily domestic routine.

The first big fact to impress a visitor to the "marvel house," as they call it, in West Orange, is the amazing simplicity of the whole process.

and one for water. This much of the apparatus is kept out of doors, for the sake of peace and quiet, though the amount of racket made by the engine is really negligible, and cannot be heard at all fifty feet from the engine house.

The storage cells are put into the cellar, where they are recharged by the engine every second or third day.



THE "MARVEL HOUSE" IN WEST ORANGE, N. Y.

Next in point of interest is its amazing economy; and last, but not least, is its amazing usefulness.

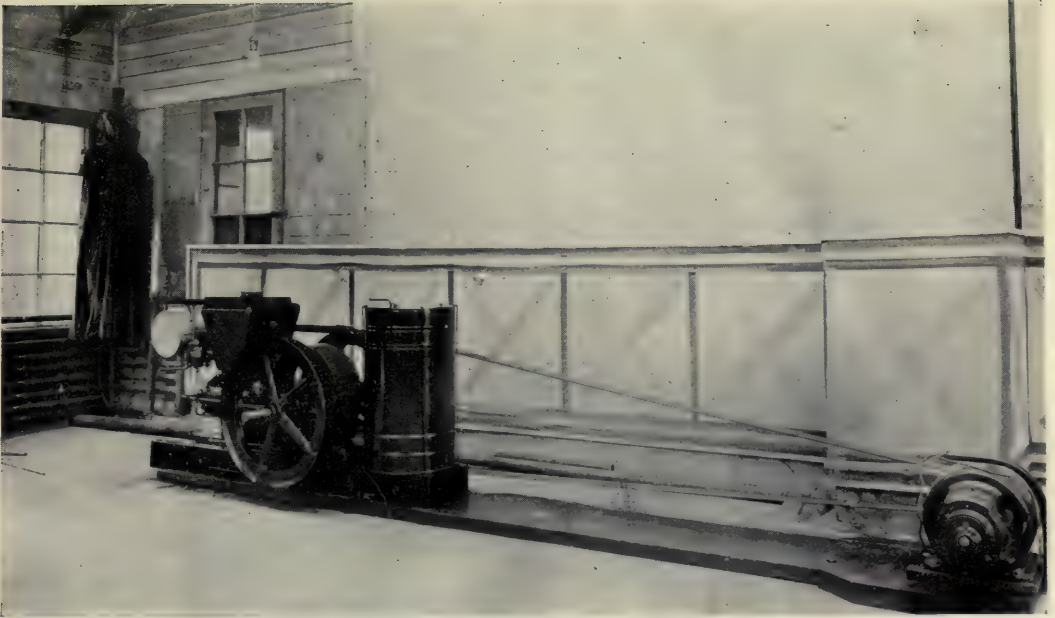
The full apparatus comes in nine sizes, ranging in price from \$380.00 to \$3,300 and the name that Mr. Edison has given to the houses boasting his equipment is "Edison Twentieth Century Suburban Residences."

The actual machinery of the isolated lighting plant has been reduced to a minimum. There is a gasoline engine, fed by three tanks—one for gasoline, one for oil,

The invariable injunction to the purchaser of a plant is to "start his engine and forget it." That is the sum total of his personal responsibility in the matter.

It requires seven hours for the batteries to be charged. The engine is started, preferably in the morning, though the time is of no consequence.

There is an indicator on the storage cells which will tell how much power is in them, and when to stop the engine, though this is somewhat a superfluous formality, since it does not injure an Edi-



THE GASOLINE ENGINE—FED BY THREE TANKS.

son battery to overcharge it. The tank for gasoline contains only so much of each fluid as well precisely charge the batteries, and when these are used up, a resisting coil attached to the engine drops a magnetized bar, which automatically disconnects the dynamo from the battery.

There is then nothing for the householder to do but to go in and turn on his lights, play his phonograph, or look at his moving pictures as his time and fancy may direct.

All of which seems so simple that one might wonder how it took the great Thomas Edison seven years of hard work and fifty thousand separate experiments to perfect it were it not that the real crux of the story is only just about to be told. There is, back of the storage cells in the basement a series of tedious research work which required the Biblical period of hard labor to culminate.

Half an eye will suffice to see that with the batteries newly charged, and the engine working at high speed, the voltage pressure on the lamps would burn them

out. How to insure an even distribution of the current, which would be invariable whether the pressure was high or low, was the difficulty which delayed the arrival of the "twentieth century suburban residence," even after the battery had been perfected.

The automatic regulator is a nest of resisting wires, controlled by a small resisting coil similar to the one which cuts off the batteries from the engine. Through this, a perfect balance is established between the voltage of the batteries and the required voltage to operate the lamps. Speaking generally, it works very much like the retina of the eye, automatically controlling the flow of light and impeding its strength where that is too great for convenience or comfort.

Once this paraphernalia is put in, the expense of running the engine is no greater than is the cost for electrical service supplied by any of the large companies. Thus, the man on the farm can give himself electricity in any amount, at no greater cost than the man in the city, once the initial expense of installing

the plant is defrayed. And the quality of light he gets is not in any way inferior. The isolated plant gives a clear white light which does not flicker until the storage batteries are all exhausted, when its diminution is a warning to the owner that he must again "start his engine and forget it."

The "Edison Twentieth Century Suburban Residence" is designed to show the country householder, in addition to the

ient of vacuum cleaners. The dishes are washed in a specially designed machine.

In the dining room there are all sorts of pots and percolators for making coffee and tea. There is an electrical chafing dish, and a combination utensil which will broil steak, boil an egg, fry a piece of bacon and make toast all at the same moment and in the most compact space imaginable.

For bringing rapture to the heart of



THE STORAGE CELLS AND AUTOMATIC REGULATOR IN BASEMENT.

routine merits of electrical service, the many things for which the precious current can be used, and the ways and means by which he can enlighten his hours of ease, as well as drudgery, by the countless modern appliances put within his reach.

The kitchen has a group of devices which materially assist the cook, the maid, and the laundress. There is a washing machine into which one puts the laundry, and from it, presently, after a button has been pushed, the garments come clean and wrung; there are electrical irons of all sizes and shape, and there are the lightest and most conven-

the struggling chorus girl there is an ingenious arrangement which, turned right side up, is an iron for pressing skirts and blouses; and turned upside down is an electrical stove for making the morning cup of coffee. A few more inventions like this and Theodore Kremer will have to draw his heroines from the suffering heiresses on Fifth avenue.

In the drawing room there is an Edison phonograph which, by means of condensite disc records and an indestructible diamond point needle, manages to rid its musical output of its scratching, metallic accompaniment. Upstairs, over the porte cochere, is an elaborate billiard room,

which has an Edison home kinetoscope for its special feature. This is, in effect, a moving picture machine on a small scale, and is fed with miniature films and throws its pictures on a four-by-five aluminum screen. These little negatives are so small that as many of them can be spaced on 75 feet of film as would require, if they were of average size, something more than 1,000 feet.

In the library there are electric fans for hot weather, and electric heaters for cold. And in imposing dignity at the library table there is an Edison dictating machine, into which paterfamilias dictates the answers to his morning mail.

The bedrooms are variously equipped with cooling and heating appliances, and all manner of first-aids to the toilette. There are electric foot-warmers for the beds, and, marvel of marvels, an electric

blanket which will dull the pain of rheumatism or ease a toothache with equal facility. The bathroom has fixtures for heating your curling irons, heating your shaving water, and sterilizing your toothbrush.

And this elaborately appointed house can be picked up intact and set down in the middle of the alkali plains without suffering one single omission of its numberless conveniences. The soul of all this mechanism comes from the cellar just beneath it, and nothing less than a house divided against itself can ever mar its sleek perfection. That, of forgetting to buy enough gasoline to fill the engines.

A whole community was put on one switchboard, so to speak. The individualistic scheme has always been considered needlessly wasteful. It is a joy to record so definite a step in the other



THE DINING ROOM, SHOWING ELECTRICAL APPLIANCES.



SLEEPING ROOM IN TWENTIETH CENTURY HOUSE.

direction. The future looks more pleasant by far, with every man's home really his castle.

In addition Mr. Edison's plan will ultimately change the whole face of nature. The Twentieth Century Limited will no longer rush like a meteor through surrounding darkness. Its way will be lined with festive little "twentieth century residences" and "twentieth century farms," which will be saving their candles and oil lamps for ancestral relics and illuminating their nooks and crannies with "twentieth century isolated lighting plants." The foothills of New England and the marshes of the Southland will

announce themselves to every night wayfarer with glows of cellar-made electricity. The darkling steeps of the Rocky Mountains will be patched with lights like monster fireflies. The Constitution shall not be a more faithful follower of the flag than light the habitation of man—if he so wills. In fact, as Mr. Edison's announced belief that the isolated lighting plant will presently be owned by every man who can rake and scrape five hundred dollars together is well founded, the sun, in disgust at his frustration, may as well hand him the earth on a platter and depart for parts unknown.

EDITOR'S NOTE.—We are indebted to the courtesy of Mr. M. R. Hutchison for the photographs of the "Marvel House" at West Orange, in which Mr. Edison has made a practical demonstration of the electrical future in store for average homes, described in Dr. Hirshberg's interesting article.

Furnishing the Dining Room

(No. 4 in the Series of Furniture Articles)



SIMPLE BUT CHARMING DINING ROOM IN CRAFTSMAN STYLE.

PERHAPS nothing in the house furnishing demands more intelligent consideration than the dining room. Both its situation and arrangement are matters of first importance. Though occupied only at meal times, the ideal dining room should have a bright and cheerful aspect. The construction of the house and the demands of the other living rooms sometimes preclude this, and then an unfortunate exposure must be remedied by a judicious use of color in the decoration and furnishing.

The choice of dining room furniture, usually lies between mahogany and oak—

in the various forms, and here, the architectural treatment of the room should influence the selection. Heavy oak woodwork demands furniture of the more severe type such as the Craftsman, or if a rich dark finish is used the Flemish oak is indicated. For a colonial style house mahogany is inevitable, though by no means limited to that particular type of design.

Oak is the more frequent choice for the average small house, as it may be found in pieces of simple design but of excellent style and workmanship. What is known as Craftsman furniture will often solve the problem of a refined and dis-



A RICH AND DIGNIFIED ROOM IN WHICH THE RUGS ARE OUT OF TUNE.

tincture effect at moderate cost. The little dining room shown in our first illustration, shows what may be done with furniture of this type and simple woodwork and decoration, to produce an effect of much charm.

Other examples of Arts and Crafts furniture are shown which may be of use to those who have this decision to make. In these illustrations the wood is solid oak with the rich nut brown fumed finish

be of benefit. These home builders were the possessors of an oak dining room set quite simple in design and without the ornate excrescence which make some old furniture so impossible, but distinctly the strong yellow oak of twenty years ago. The living room woodwork had been treated with a silvery gray stain and given a dull finish. A rich dark shade of green was used for the high paneled wainscot and standing woodwork of the



SIDEBOARD 6 FEET LONG, COSTING \$75; CHAIR, PLAIN, \$4.25; UPHOLSTERED IN LEATHER, \$11.

which so readily harmonizes with almost any color scheme. The handles and trim are of old copper metal work. The chairs are upholstered in Spanish leather, though this may be omitted if too expensive. The sideboard might be omitted and a small serving table at a cost of \$15.00 to \$20.00 substituted, in case the former were built in with the woodwork or the room is small. There is also a china closet in the same design, costing about \$35.00. It is sometimes the case that we must reckon with furniture already on hand, and a description of how a problem of this kind was overcome may

dining room, affording a pleasing contrast with the gray of the living room.

The wainscot of the dining room was built of narrow tongue and groove boards of chestnut, against which three-inch strips of the wood were placed at spaces of eighteen inches. This was topped by a four-inch shelf and, finished, supplied an inexpensive but effective wainscoting to the room. On the wall space above the plate-shelf the gray wall was embellished by a row of stenciled peacocks broadly touched in. The brilliant blue and bronze green of the plumage was strikingly decorative.

While the house was still incomplete, work upon the dining room furniture was begun. This was done by the owners, as they were determined to utilize it at as little cost as might be. A liquid which dissolves and removes the varnish was secured, and after the finish was taken off the filler and stain was cleansed from each piece, using for the purpose a stiff wire brush. The result left the furniture quite guiltless of finish or color, and the wood like new. After several consultations with the painter who was finishing

China, quaint of shape, and in color and design a good (though inexpensive) reproduction of the Willow ware, was selected for the room. The center of the table held an embroidered square of dull green linen, the design brought out in the colors shown in the rug. On this a small black teak-wood stand was set, which held a low brass bowl of flaring lines; this supplied a most decorative and unusual center-piece. In the bowl was placed a metal flower holder formed of a series of small rings joined together and



SERVING TABLE 38 INCHES LONG. COST \$15.

the house it was found necessary to refill the wood. When the grain was filled, and the surface smooth a first coat of silver-gray paint was given it, which was allowed to dry before another coat was applied. The two last coats were of enamel and dried with a beautiful soft gloss. Thus bringing into the dining room with its green stained wainscot the silver-gray tone of woodwork and walls which prevailed in the adjoining room, and it was found most effective.

The rug chosen for the dining room was of Chinese design, though of domestic make. This showed shades of dull old blue, green, black and a little orange on a self-colored ground.

standing about two inches high. This held the stems of flowers in an upright position in the center of the bowl. Lilies, flags, tulips, or any of the stiff and more conventional flowers, were found effective to use in it.

The window curtains were an especially interesting feature of these rooms as they were made from a very coarse weave of scrim, gray in color, and finished at the sill line of the window by a hem-stitched edge. This material retails for about twenty-five cents a yard, and is thirty-six inches wide. They were lightly stenciled with crossed peacock feathers in either corner.

The accent of strong color provided by



TABLE 84 INCHES IN DIAMETER, FROM \$42 TO \$60; HAS 8-FT. EXTENSION.

the stenciled frieze of peacocks, dominated the scheme of the room and gave it character.

Sometimes too, the house furnisher must bear with golden oak woodwork and mahogany furniture. If such an unhappy combination must be made, something may be done to harmonize these disparities by the choice of wall paper. While the one tone of the painted or tinted wall would only bring the trouble into bolder relief, a paper showing a combination of mahogany, dull green, soft browns and coppery yellows, may do much to harmonize the woodwork with the mahogany furniture. As for instance a paper with a coppery brown ground, and against this a rough brown trellis covered with grape leaves in the mahogany, green and dull yellows of soft autumn foliage.

We show one more illustration of a dining room in which there are many good points, but in which there is an unhappy mixing of rich Flemish chairs with

table and chairs which are quite out of keeping.

The heavily beamed ceiling and the tapestry covered wall above the high wainscot, the high mantel-shelf and generous fireplace, all make for dignity and beauty in the room. Another good feature is the high window above the wainscot, beneath which the serving table is placed. The figures in the rug seem aggressive and too pronounced in the picture, but in reality are much softer and less noticeable. The pierced brass covering of the dome over the table harmonizes well with the rich color effect the room provides. The balanced placing of the articles on the mantel and the row of steins and loving cups on the wainscot shelf are decorative.

But the plates set against the tapestry would better be away, and so would the embroidering back of the serving table. The lesson of restraint, is a difficult one to learn.

A Seashore House of Unusual Design

By W. J. Freethy



A SIDE VIEW—A PORTION OF THE REAR OF THE HOUSE.



VISITOR to Marblehead, a seaport town of Massachusetts, containing within its limits much in the way of buildings both old, quaint and interesting, seldom fails to visit "The Neck." In this part of the town where are located some of the finest residents of the North Shore, and where can be found wild and rocky scenery, superb ocean views, invigorating sea breezes, is situated a most interesting bungalow of a type rarely seen and which is the subject of this article.

Situated on a slightly eminence with a view of commanding all directions, the Bishop bungalow is located at a point midway between the ocean and the picturesque harbor dotted with fleets of yachts, from the small dory up to the most palatial of floating palaces. The spot is known as "Nanepashemet," a name of Indian origin. The house was designed by Messrs. Bacon & Hill, Hill & James' successors, architects, of Boston who have given New England some of the best work in domestic architecture.



A PORTION OF THE DINING ROOM.

It stands back quite a distance from the road, with its every detail attracting the attention of the passer-by as being something out of the ordinary, and seems from its very design a part of the landscape itself, ensconced as it is in a beautiful setting of green shrubs, and the gray backs of the rocks projecting above the surface.

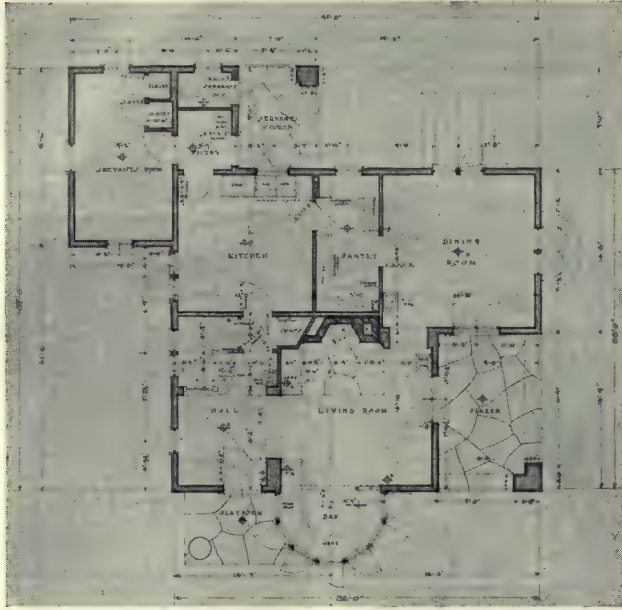
It is approached from the highway

below by a winding path, laid between the shrubbery with quaint English stepping stones, grass-grown between; this path leads directly to the inviting porch of the home.

The first view suggests immediately the simple white plastered, thatched roof cottages which one who has traveled abroad will remember seeing in the rural village districts of England.



THE LIVING ROOM WITH A VISTA INTO THE DINING ROOM.

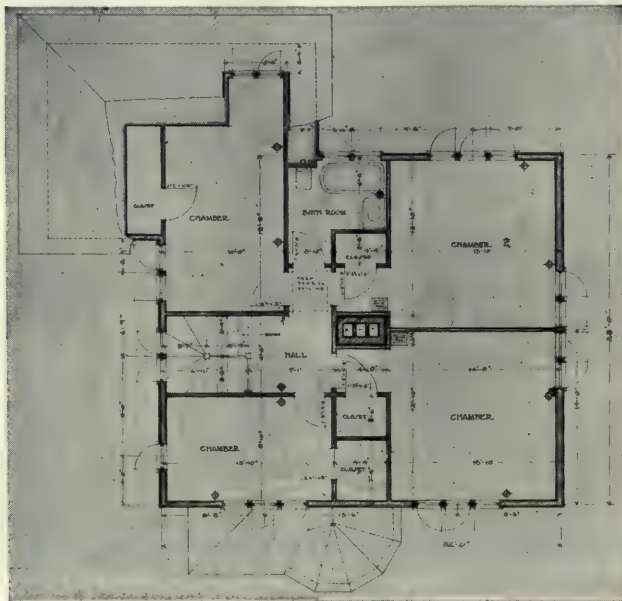


The roof in this case, however, is cleverly laid with double courses of cedar shingles, with cunningly rounded eaves and hips, and with the roof of the dormers hanging over the windows below in the same lazy curves that the thatchers weave so nicely.

The walls are of rough cement plaster

finished with a pebble dash coat, giving with its rough cast surface an indefinable light and shade, and by which a texture and value could be produced in no other way.

The heavy woodwork of the eaves, seemingly a part of the roof, the casement windows, some of wood, others



quaintly made of leaded glass, give an added charm, which altogether simulates easily its English prototype spoken of above, and the whole house, while being only of frame construction, covered with cement on wire lath, has on account of its proportions, its surroundings, etc., an air of comfort and solidity.

The dormers, the roof, plaster arches,

it has been preserved within, how study has been brought to bear on each little detail, and the most obtained at the least expense, without losing one iota of character, so that the effect without and within may be on lines of simplicity and harmony, in construction, design, and material, and forms a complete whole. The entrance door leading from the stone



DETAIL OF STAIRWAY.

chimney, etc., and the small details "hang together," and are in perfect scale and harmony.

It is only when one is familiar with the exacting details of designing such a house that they can realize the difficulty of producing a charming exterior for such a simple home. In this connection it might be mentioned that frequently in designing such an exterior, the interior effects have been forgotten, but not so in this case, so let us see how carefully the individual-

flag-laid floor of the front porch to the hall is sheltered by a flat coppered roof connected to the large bay at the side, and is hung by an iron chain from the wall above. The hallway as one enters, finished in cedar, is interesting indeed, with its simple staircase of plain restrained treatment, except for the newel and its turned top. There is a rough plaster arch leading directly to the living room, a spacious apartment, finished in cypress, the walls above the high wooden wain-



A BAY IN THE LIVING ROOM.

scot are treated in rough plaster stained a golden brown, with a wooden timbered ceiling above.

On the side next the dining room is a huge fireplace, faced with brown brick, carried to the ceiling, leaving at one side a niche for flowers, books, etc. Iron fire-dogs and cheerful fire on stone flagged hearth, with a comfortable seat at the side, must give this corner comfort in plenty.

Directly opposite the fireplace is a circular bay-window with casement sashes, looking out upon a superb view of old ocean, the opposite shore and the harbor between. Under the windows is another low seat with quaintly made arms or balusters, finished in cypress, stained to match the woodwork, and cushions with golden brown velvet.

Leading from the living-room, through French windows, is a large secluded veranda, also with floor of stone.

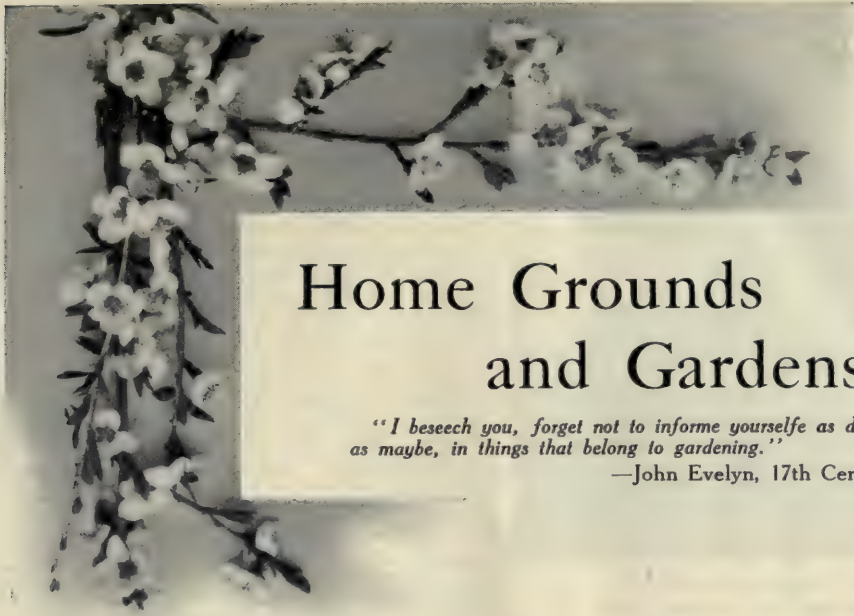
The dining room opens directly off this living room at one end. The walls

here are also rough plaster, tinted a soft, warm gray. Like the living room, this room has wooden ceiling beams with sheathing over.

The woodwork here is also stained, while the furniture, of a simple Mission type, quaint rugs, draperies, and iron ceiling light, make an interesting room. The veranda is also reached from the dining room by long French windows. The kitchen, compact in its arrangement of cupboards, recesses, shelves and well-equipped pantry between kitchen and dining rooms, all combine for neatness and order.

On the second floor are four chambers, good closet room and a commodious bathroom, fitted up with the usual modern and up-to-date plumbing of enameled iron and porcelain. The lighting of the house is by electricity, supplied through well-designed copper and iron fixtures.

Provision has been made in the basement for heating by hot air. The cost complete of this house was about \$5,000.



Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

—John Evelyn, 17th Century.

Novel Conceits in Gardens

By Monroe Woolley



HE Japanese people are great for imitating nature, not only in the gardens about their homes, but in the larger public parks as well. Nearly every Japanese home, no matter how humble, has a miniature park in the back yard. Even the stores have little rest places in the open back of the shops where the customer may go and imagine himself seated next to nature. But perhaps not a thing in these miniature gardens may be real. Ofttimes the space at hand may not exceed a plot more than ten feet square. Yet in this little area the artful Jap will fabricate a lake, with tiny swans swimming on the surface, and a cute little fountain sputtering and spitting water in the center. On the lake shores may be tiny houses of bamboo, and rustic seats and bridges. The Japanese have a way of dwarfing pine trees, so that they may be able to sport real

pinces, often hundreds of years old and only a foot or two tall, in their artificial parks.

The Japanese taste in such matters has found its way clear across the Pacific to our own coast. Westerners are not only imitating Japanese methods in house building and making pagodas, but they are resorting to faking nature, after the Jap manner, in fitting up public parks. A clever imitation of an overgrown toadstool, which looks like it might have been transplanted from a park in Nagasaki or Tokyo, is one of the imitations worked out by the aid of an old tree stump and some rustic material, while park entrances generally have archways not unlike those to be seen in China, Japan and Korea.

For centuries past, ever since man has been half way civilized, fountains have given much beauty and charm to private



GIANT TOAD-STOOL SEAT.
Chetzemoka Park, Port Townsend, Wash.

and public gardens. No doubt Adam and Eve used to sit on a fountain edge, gazing into the liquid depths of the pool while they discussed their trials and tribulations, and figured on what the bill of fare for the morrow would be.

Much money has been spent on foun-

tains throughout the world, and it has come to pass in some quarters that as much money is put into them as ordinary folk can rake and scrape to put in dwellings. In late years electric fountains have come into vogue with apparatus for playing the various streams over lights of bright and catchy hues.

But fetching fountains may be had at small cost. Fact is, they may be had at an expense only for labor. Field stone and a few feet of water pipe will cover the bill of material. The remainder depends upon the taste and ingenuity of the architect. Some of the most attractive fountains in our public parks are of this cheap variety,—cheap in price, but from a standpoint of art worth much. A clever arrangement is that of introducing sprays from the mouths of cast iron turtles placed on the surface, these streams playing upon a pyramidal formation in the center of the pool. Fountains of this sort are ideal for small cities and towns, and their cost is not beyond the means of the ordinary home owner, provided, of course, the water bill is not too costly.



A PRETTY FOUNTAIN BUILT AT SMALL COST—CHETZEMOKA PARK, PORT TOWNSEND, WASH.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 392 WILLARD C. NORTHRUP, Winston Salem, N. C.

B 393 JACK LEHTI, Washington, D. C.

B 394 KEITH'S ARCHITECTURAL SERVICE, Minneapolis

B 398 W. E. COOLBAUGH, Los Angeles, Cal.

Design No.

B 395 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 396 BUNGALOWCRAFT CO., Los Angeles, Cal.

B 397 ARTHUR C. CLAUSEN, Minneapolis, Minn.

Design B 392.



HIS brick and cement house was designed for a southern locality, but is so much more like northern houses that it can be adapted to any situation. As shown in the floor plan, fireplaces are intended to supply the necessary heat, there being four on the main floor and three above. Most of these fireplaces, however, could be eliminated and a heating plant substituted at about equal cost. The two bath rooms on second floor are arranged for the minimum of cost, as they are close together and but one main soil pipe needed. The portico entrance is attractive, also, the covered porch or loggia. Hardwood floors are estimated throughout, with fir or cypress for the finish. The height of rooms on first floor, nine feet 5 inches; second story, eight feet three inches. Estimated cost, about \$8,000, including heating and plumbing.

Design B 393.

This design was one submitted in the Brick Builder competition for a \$6,000.00 Natco Hollow Tile house and was awarded second prize.

The exterior walls are of Hollow Tile 8x12x12 inches finished with cream stucco. Roof shingles are stained.

Inside walls are plastered direct on the tile with wood joists for floor construction. Height of ceilings: First floor, nine feet; second, eight feet, which will be clipped. 7-6 basement, with cement floor. Hot water heat, laundry,

veg. rooms, etc., are provided. There is a fireplace both in Den and Dining Room. The porches have tile floors. Interior finish throughout is hardwood, being oak for first story, and pine for second story.

This extremely fetching composition in Natco Hollow Tile is as complete as to its floor plan as it is attractive exteriorly. The reproduction of the thatched roof of English cottage architecture imparts a most home-like feeling, and puts the design in a class by itself.

Design B 394.

This is the style of house our colonial ancestors built when they wanted something architecturally refined and imposing. The house is built of brick with stone for foundation wall and classic details of trim and porches of wood. The vestibule has the usual sidelight for both doors and opens into the central hall with the stairway at its further end. At the right is the living room with beamed ceiling, fireplace and circular bay. The dining room adjacent has a sideboard, a wide window seat and opens to a rear porch. Through the pantry, containing refrigerators, iced from the entry, and the left of the hall, the latter with an at-other usual fixtures, one passes to the kitchen. The parlor and library are at tractive bay window. All the main rooms communicate with the hall and each other by sliding doors. The rear stair is located at the porte cochere entrance that guests may proceed to the second floor, remove their wraps and descend the main

staircase to the receiving line. The finish of the first floor is white enamel, oak and birch and hardwood floors. On the second floor are provided four large chambers and bath room with servants' room from rear hall, additional. Finish white enamel and birch floors. The attic is large and could contain a ball room. Hot water heat, laundry, storage space, etc., located in basement. Estimated cost, \$16,000. Simple details and finish would reduce the cost materially.

Design B 395.

This is a southern home recently designed for the residence of Robert E. Lee Shafer, Boonsboro, Md.

It is liberal in its appointments with a ground area of 59 feet frontage by 46 feet depth exclusive of piazzas and conservatory. Standing with the broad front to the street, built on the low, English half-timber style, the walls are cemented between the timbers with a "pebble dash" finish, and all of the timber throughout left with a rough surface and stained brown, the roofs covered with red Spanish tile.

The central front piazza is 26 feet in length by 12 feet in depth, the floor extended each way with a broad terrace, the same being carried around on the right hand side back to a central porch, affording a side entrance. The piazza and terrace are surrounded with a native cobble stone wall with cement cap and steps at the entrances, the porches are built in timber style with heavy square timber posts and all the gables and cornices have wide projections with the timbers showing, and barge boards in the gables and two gabled dormers in the front roof treated in the same manner.

The front of the house in the second story has an overhang of several feet over a projected window on each side, one coming in the parlor on the right side and one in the sitting room on the

left side. A liberal staircase opposite the entrance leads to the second story. At the rear of sitting room is a billiard room 16 by 20 feet connecting through sliding doors with the dining room. At the left side of house and opening out of the sitting room and billiard room is a conservatory and porch connected together, and at rear of billiard and dining room is a large piazza carried up two stories high with sleeping porch on second floor. There are six rooms on the second floor, two bath rooms and ample closets. It is estimated to build this house complete for \$14,000. The finish of the first floor is hardwood and the second story in pine painted. The finish is simple and plain but everything about the house throughout is good.

Design B 396.

This little bungalow which has just been erected in Los Angeles has called forth almost extravagant expressions of admiration. The porch work and exposed chimney as well as the terrace wall are built of field stones with broad caps and coping of cement. The exterior is covered with re-sawed siding stained a very dark green and the exterior trim is surfaced and painted white. The roof is covered with prepared roofing stained a very dark red. The house is not large, being 44 feet deep and 28 feet wide exclusive of the porch and terrace.

The living room, dining room and den have hardwood floors; the buffet in the dining room has a bevel plate mirror; the living room fireplace has a pressed brick front with massive wood mantel on either side of which are seats with lockers built under the windows. The kitchen is fitted up in full cabinet style with every convenience that can be asked. The plumbing is first class in every respect and the bath room has a linen cabinet across its entire width built under the windows. The interior trim is of Washington fir (which is quite similar to



DESIGN B 392

Willard C. Northrup, Architect.

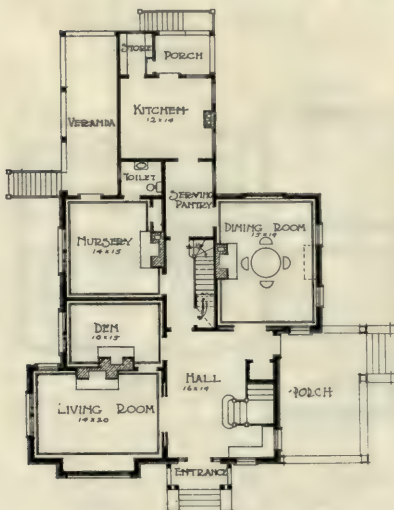
Design for the South but Complete for North

Georgia pine) stained and finished in the principal rooms; enameled in the bath rooms and bed rooms and painted in the kitchen.

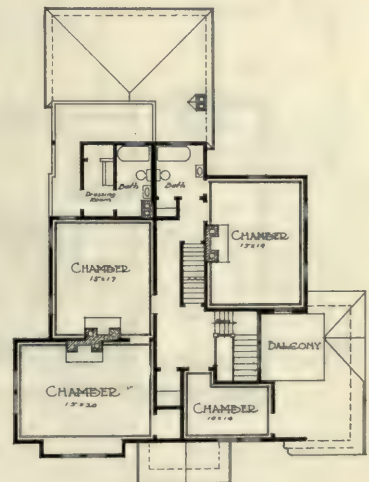
The cost of the house in Los Angeles

was \$2,100 complete, but with a cellar and heating plant and the construction required in a cold climate the cost will be at least \$500 more.

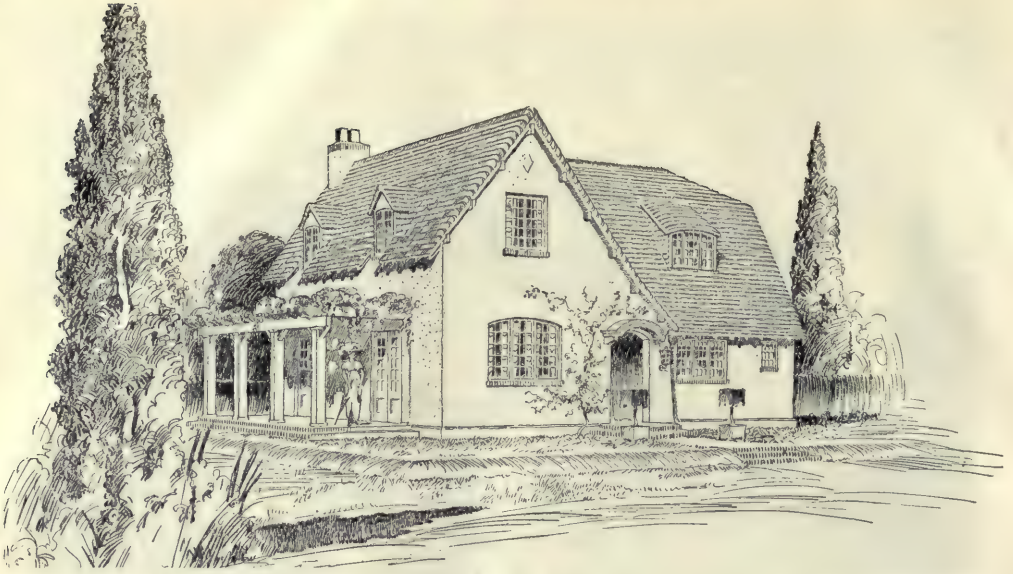
It might be remarked here that the



FIRST FLOOR PLAN



SECOND FLOOR PLAN



Courtesy National Fireproofing Co.

Jack Lehti, Architect.

DESIGN B 393

Second Prize Design in Hollow Tile Competition

terrace on the side of the house may be omitted entirely without detracting from its appearance.

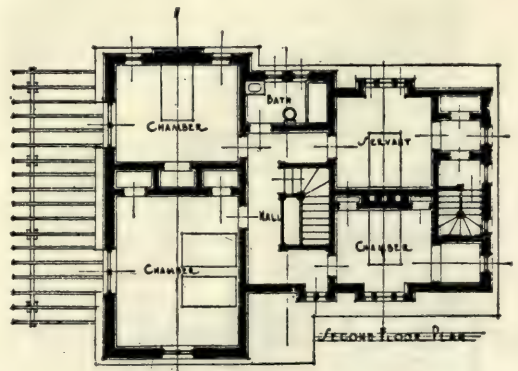
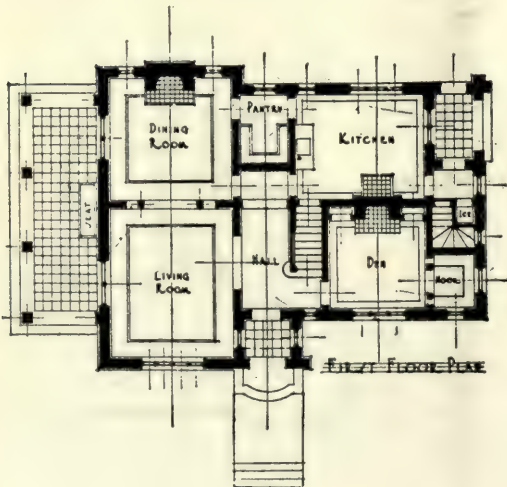
Design B 397.

Front and side views are given of this cement and shingle house built in Minneapolis the present year at a cost of \$3,342, including heating, plumbing and lighting. The "extras" on the builder's contract were just \$1.00.

The exterior is cement stucco for first

story, shingles stained a Stickley brown, the second. The contract included a full basement with laundry and cemented floors sloped to plan drain; fuel bins with "Hopper bottom" to slide coal to gate. Hot water heat. The living and dining rooms and stairs are finished in birch stained dark mahogany. Natural finish in kitchen, white enamel second floor. Maple floors and brick fireplace.

The kitchen contains cupboards with





DESIGN B 394

Keith's Architectural Service.

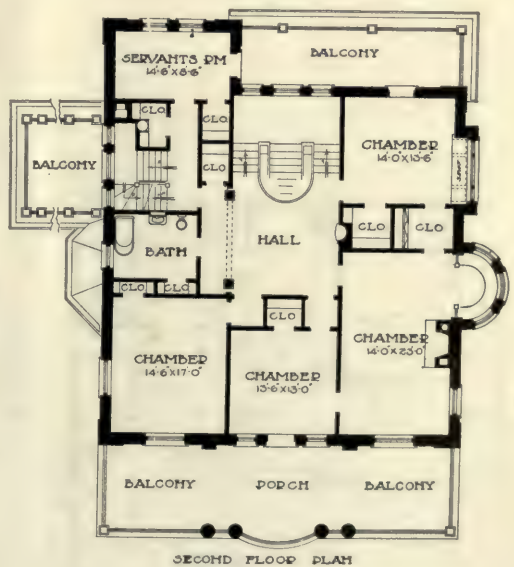
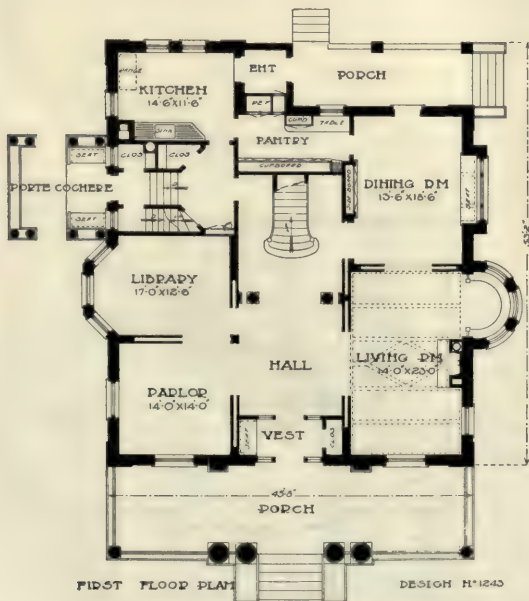
A Georgia Type of Distinction

adjustable shelves, bins and many small conveniences.

Design B 398.

Foundation concrete, porch and chimney cobbles, porch floor cement, mantel brick, shakes on walls composi-

tion roof. Pine finish throughout. Oak floors, stained and waxed finish in living room and dining room; balance of floors pine. Balance of finish, kitchen and bath room wainscots enameled. Plaster paneling in dining room. Cost, \$1,500.00.

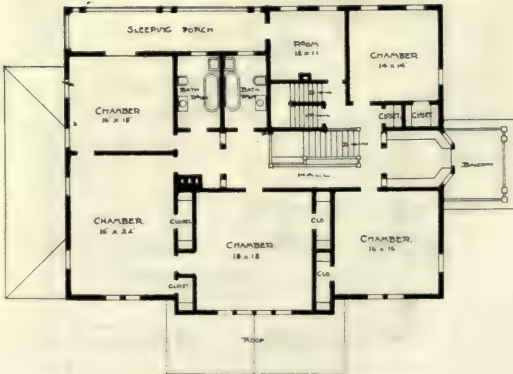
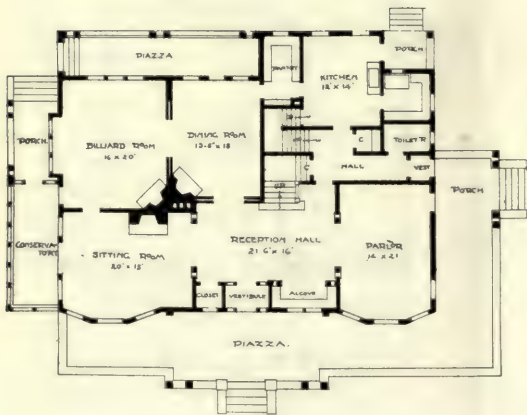




Chas. S. Sedgwick, Architect.

DESIGN B 395

A Southern Home of Modern Design

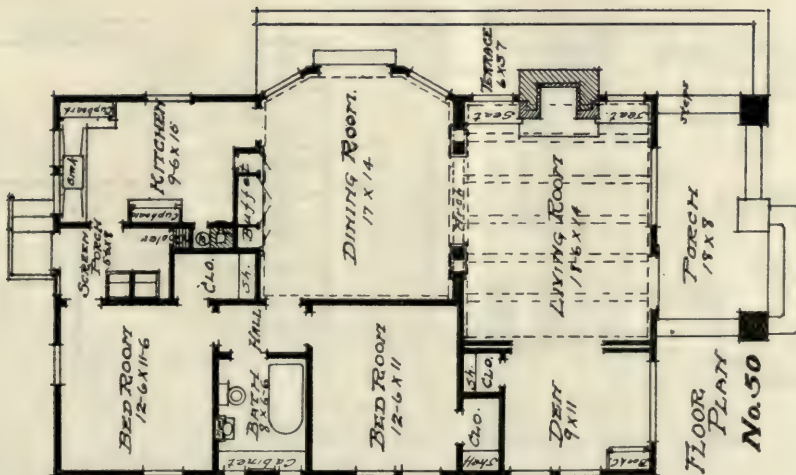




Bungalowcraft Co., Architects.

DESIGN B 396

A Los Angeles Bungalow

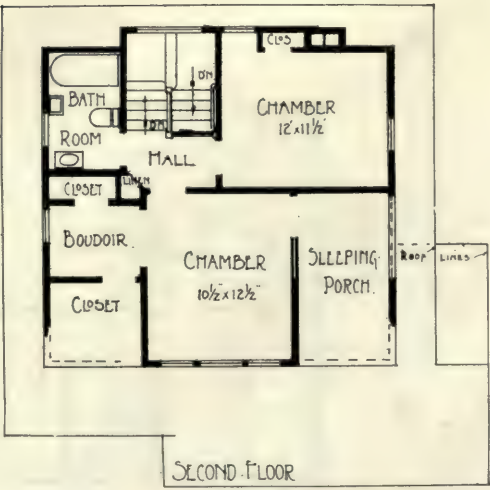
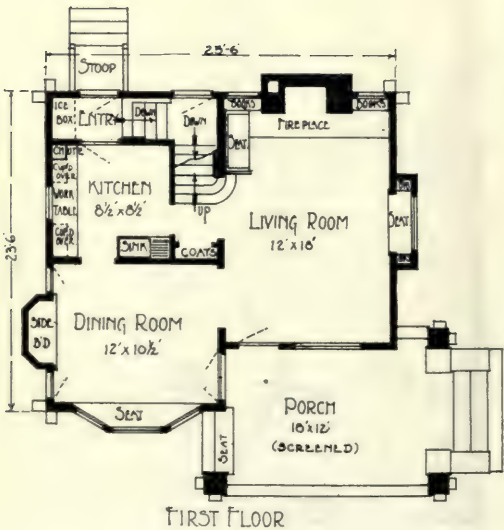




Arthur C. Clausen, Architect.

DESIGN B 397

Two Views of Cement and Shingle House

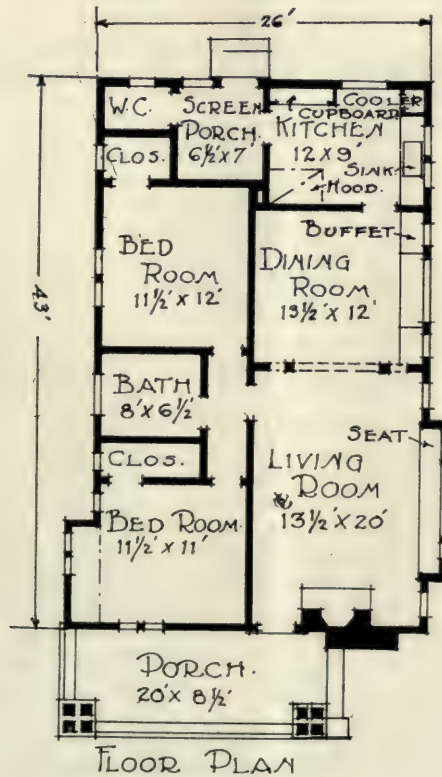


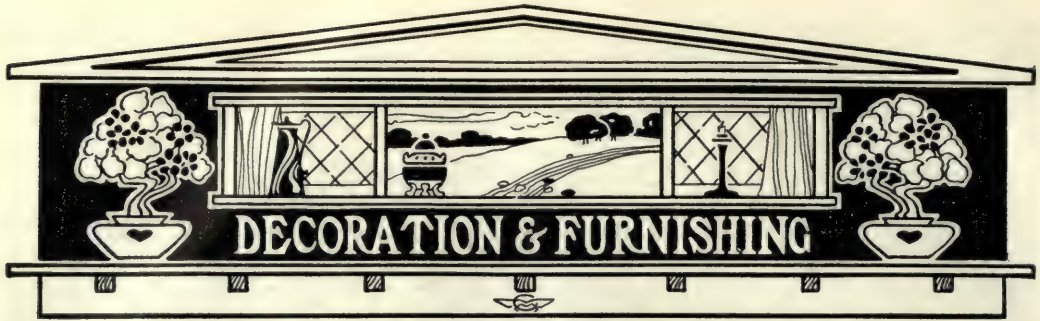


W. E. Coolbaugh, Architect.

DESIGN B 398

A Typical Southern Bungalow





Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.



THE tendency in furniture fabrics and materials for hangings seems to be rather away from the strong colors of the last few years. One is less conscious of the prevalence of green and positive shades of red are at a discount. Most of the greens are very soft and dull, and the reds are on the mulberry tone. There are charming things in sage greens and grays, and the soft old rose tones are having their turn at popularity.

A good color scheme for a parlor with mahogany furniture is a combination of white, gray and yellow. The paper used is one of the tapestry designs in shadowy grays, the kind that suggest a wood on a snowy morning, the painted woodwork is white and the rug a plain gray darker than the walls. Curtains and covers for the upholstered pieces are of printed linen with a broad stripe of clear bright yellow alternating with a narrower one of small flowers on a cream colored ground. The curtains next the pane are of plain cream colored net and the bric-a-brac carries out the yellow note, further accentuated by yellow silk lampshades and squares of yellow damask on the bare tops of the tables. Such a treatment is more effective if the walls can be wainscoted for part of their height. Or the woodwork may be fumed oak and the furniture wicker in the new silver gray finish. A more expensive treatment for a formal drawing room would substitute for the printed linen a furniture brocade in yellow and cream, or else a French tapestry with yellow stripes on a flowered ground.

Fumed Oak and Rose Tones.

A good foil to the grayish brown of fumed oak or its near relation Circassian

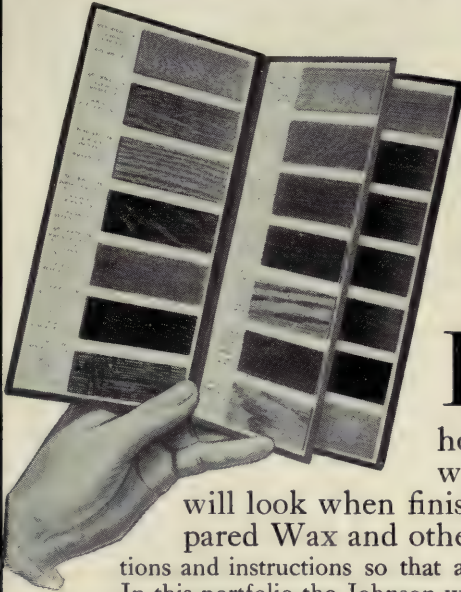
walnut, are some of the old rose tones. There is a delightfully cheerful quality to the best tones of this color, which is at its best in piled fabrics, or those with a good deal of sheen. One gets delightful tones of it in the figured liberty velvets, which are not only beautiful, but immensely durable, and quite worth their cost.

For a room in which this combination is to be used there is a charming paper with a leather surface, in color between a coachman's drab and an ashes of roses, which is to be carried plainly up to the picture moulding. To go with it is a three-inch border of Tudor roses and dull green leaves, which is carried around the four sides of each wall, about nine inches from the edge. This wall is a charming background for mezzotints or other pictures in color. If furniture is to be bought specially for such a room, the fumed oak furniture which is made on French lines is advisable and, although much less expensive, is quite as satisfactory as Circassian walnut. If an Oriental rug combining blue, rose, cream and green can be had, a jar or vase in very dark blue will not be amiss, and a good piece of green pottery may occupy another corner with good effect. But if an old rose rug is chosen it is best to keep the room as far as possible in one color.

Copper Color and Weathered Green.

Appealing to a different sort of taste is a room in the dull green stain known as weathered green for the woodwork, with walls in a warm copper red. This color is a difficult tone to find in paper, and is more easily attained in tint. The tinted wall may be effectively enriched by the application of stenciling in a reddish shade of gold. Such strong color is rath-

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er overpowering in a large room and is at its best in a den or other small room. It is a capital background for the popular brown-toned photographs in dark frames. In combining positive color with copper red most people think first of blue, and deep blue, not too bright, combines well with it. More effective and distinguished is the use of the light green, guiltless of yellow, which one finds in Oriental fabrics. Nor is the deeper green of Teco or Grueby pottery amiss.

For a room combining copper color and green one of the leaded windows made from the bottoms of green glass bottles is immensely effective. The obvious thing with such a window is the casement opening and curtains are rather out of place, although if the exposure is a sunny one a sill length hanging of plain raw silk is not objectionable. But too much emphasis cannot be laid on the fact that with a rather dark, although bright, color scheme the conventional white thin curtain is out of place. There are exceptions to this rule, where it is essential to privacy, but a bottlegreen leaded window does not offer such an exception.

In Communion With Old Mahogany.

It has happened to the writer to spend some months in the society of antiques of some distinction, and some reflections suggest themselves to her. One of them is the fact that few people seem to understand that the things which are put with old furniture should be, while not necessarily antique, at least of a sort that might have been used by the original owners. To illustrate: a good deal of Oriental china, notably Canton, and many "Turkey carpets" came to this country in colonial times. Japanese things didn't. Japan was a sealed book to the rest of the world until the late fifties of the last century. Therefore a mahogany four-poster draped with blue and white cotton crepe is an anachronism. Much worse is the use of the various cross-barred Turkish and Syrian materials, for they are of very recent importation. On the other hand a rag rug is perfectly proper for the old fashioned room, although if the furniture is of some pretensions an Oriental one is much better. If it is desired to reproduce the homely

comfort of the farm house bed chamber of that period braided rugs are the proper thing. Another floor covering which is very satisfactory for the old fashioned room is a number of rush mats in different sizes. They look very old fashioned, and coming as they do from Holland have probably been made in the same form for centuries.

Hopelessly out of place on an old mahogany bureau is the fluffy modern lace and muslin scarf. In the first place the top of the bureau is generally too much cut up and it is almost impossible to adjust a ready made covering; in the second place, our grandmothers were much too sensible to use anything of the sort. They made carefully fitted covers of white pique or dimity, edging them with a narrow cotton fringe. The pin cushion was covered with a bit of substantial brocade and might or might not have a muslin cover drawn over it, and the confusion of trifles which cover the top of the modern bureau were wholly absent, though there might be a cut glass bottle of some toilet water and a candlestick.

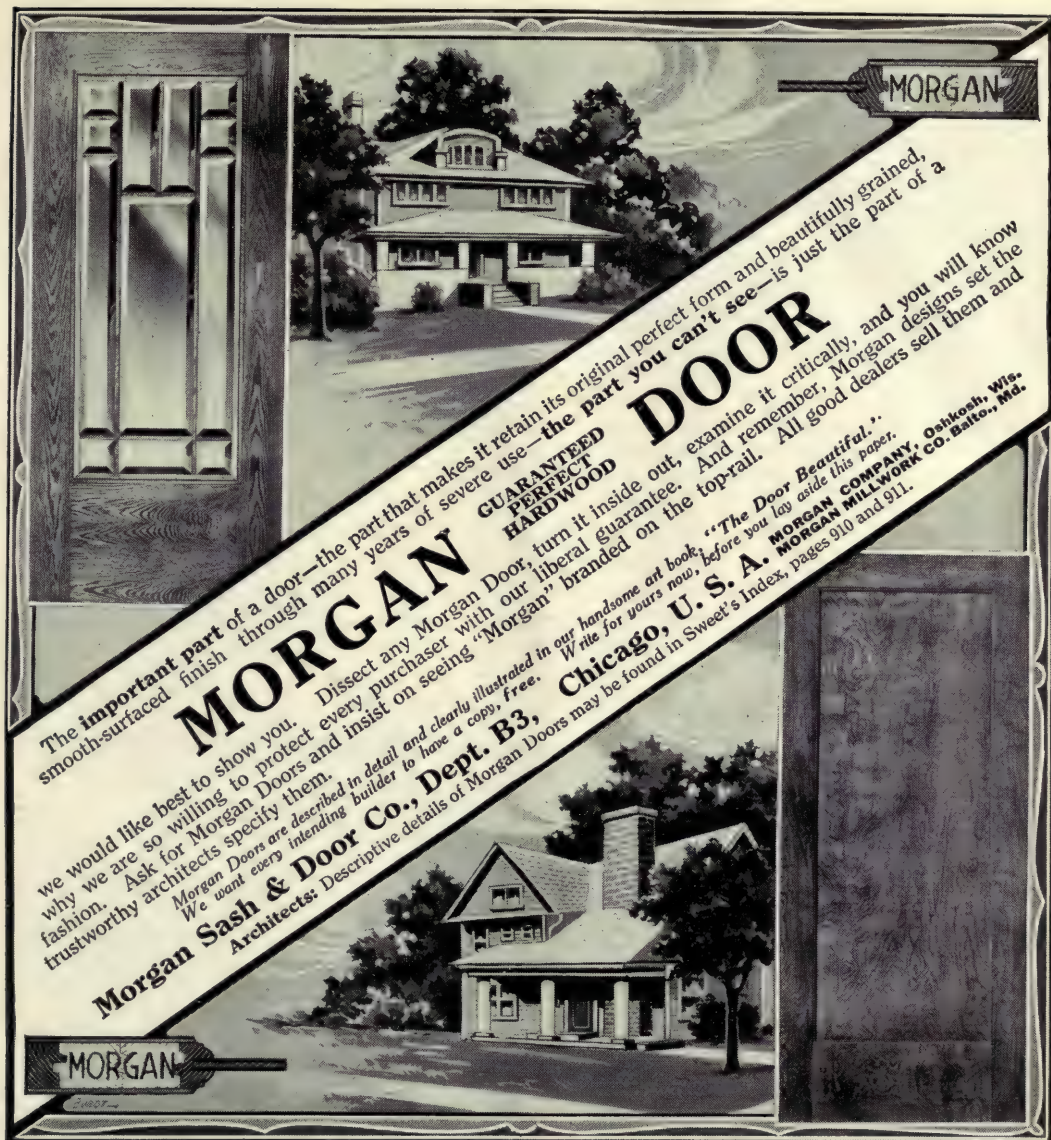
Black Grounded Cretonnes.

A charming use for one of the effective cretonnes with a design of brilliant colors on a background is as a cover for a single piece of furniture in a room, either a couch or a large chair. Most of these cretonnes have a good deal of pink in them and they fit in admirably when the general scheme of the room is old rose in some of its shades. These same cretonnes are often used for curtains in a room of lighter tones, thus giving the needed touch of black, which does so much for the colorless or negative room.

In the house of a well known decorator this material is used for curtains with a rose and green rug and furniture with gilt frames and coverings of green and white brocade. The vogue of these black cretonnes is another example of the education of the public taste to a gradual appreciation of a novelty.

Making Use of Embroideries.

People do not embroider as much as they used to. Lace work, Irish crochet and any number of other handicrafts are more popular. What shall we do with



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the monuments of industrious effort accumulated in years past? Often they have real merit, if they are a trifle old fashioned, and they certainly represent the expenditure of a good deal of money.

One thing to do is to find them a suitable environment. Years ago, when the use of blue denim was popular a woman embroidered the covering of a long chest to be used as a couch and to hold gowns. There was besides the strip covering the sides a cover for the mattress and for three pillows, the latter supplied with ruffles. The woman died, the embroidery got rather dingy—it was done with white linen floss—giving a shabby air to the room in which it stood. But it staid there because the maker was dead. Then some one came along who recognized its possibilities. She had it washed and it came out looking like new. She replaced the ruffles with thick white cord and she added a large and small pillow covered with Turkey red twill. On the matted floor she laid a blue gray Indian dhurry. There was a tiny red flower in the wall paper and she painted a wooden chair and a small table a vivid sealing wax red. Everything else having any color she took out of the room. She furnished the bureau with trays and boxes of vivid red lacquer. She hung on the walls some black and white pictures in red passe-partout bindings. On the mantel she put glass candlesticks with scarlet candles, a red leather clock and a red photograph frame. In one of the windows she set a pot of scarlet flowers in bloom. And when it was all done the couch had acquired a new beauty, as well as its sentimental interest. Of course, you can't do that sort of thing with the "made for the trade" things sold partly finished in the shops.

Sometimes a piece of work is hopelessly faded, but otherwise in good condition. Then is the time to try the dye-pot. The original color must first be discharged by boiling in a strong solution of cream of tartar. Then a bath of blue or green dye will do wonders. Naturally the result will be in a single tone of the color, and if it seems monotonous in effect the lines of the design can be picked out with black.

Most hopeless of all seem the table

pieces embroidered in white silk which has turned brown. These, too, can be bleached out with a solution of lime water. Effective bits of the pattern can be cut out and the background darned in with a color, and the completed work used to fill in a tray, or for a lamp mat or small cushion. In the case of colored floral embroideries on white linen which have not faded a background can be darned almost solidly with white, cream colored or light gray silk. Such a bit of work in an oval white enamel frame makes an exquisite tray. Part of the pleasure of having the thing is the feeling that something otherwise worthless has been utilized.

Reversing a Four-Poster.

However delightful a four-poster is in the abstract it does not appeal greatly to the modern mind. Its place is more often in the guest chamber than in the master's bedroom. A way of adapting one to modern ideas was suggested by a bed hanging shown in an exhibition of needlework. The framework at the head of the bed had been removed, leaving only the low headboard. All the framework of the tester was removed and the two heavily carved foot posts connected by a strip of wood, slightly arched, stained and finished to match the bed. The foot of the bed was set against the wall and the space between the posts filled in by a hanging which was attached to the arched strip. The idea came from England, and a coat of arms was embroidered on the original hanging, but the cretonne of the furnishings of the room could be used, and a picture could be hung against the folds. By this arrangement one objection to the four-poster is obviated, its lack of the foot-board which most people find so essential to their comfort.

Screens.

Some bedroom screens lately seen were covered with an effective printed linen. On the side panels the entire covering was of the linen. On the middle panel a strip of wood made a division about two and a half feet from the bottom. Below this was green denim in one of the homespun patterns, above it the figured material.

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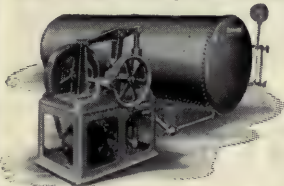
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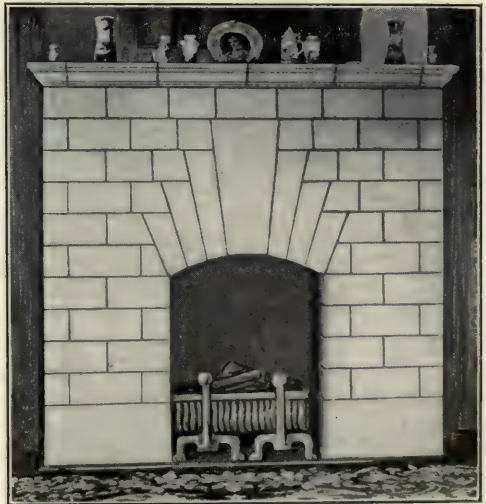
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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

* Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

General Suggestions.

W. C. B.—“I enclose floor plan of house to ask for suggestions in wall decoration, draperies, rugs, etc.

“House finished in fumed oak, oak floors, casement windows, ceilings nine feet, four flat strips across dining room ceiling, six across living room. Same trim around the rooms on line with top of floors and windows, fireplace of brown mottled brick, smooth walls, book cases on each side of fireplace, also at each end of window seat. Side lights as well as center.”

Ans.—Your floor plan shows an excellent arrangement, which lends itself well to the decoration and furnishing. The northeast living room is well lighted and we should treat this room in ecru shades with some brown and deep rose. There is a particularly soft shade of ecru in the new wall fabric called Shadow-Kone, lighted up with a hint of gold. Either this or the fabric paper in light browns blended with rose, we would suggest for living room walls. A Shawmutt or Roslyn rug with plain center in the ecru of the wall and border in two darker shades of brown. We would furnish with a mixture of fumed oak and brown wicker or rattan. We would advise for these latter pieces a settee and fireside chair with small chair, all upholstered in taffetas or cretonne. A very delightful imported cretonne lately seen had just the coloring for this room, tans, brown and deep old pink all charmingly blended, price \$3.50 yard, 50 inches wide. The window seat could be done in the same or in ecru velvet or corduroy, with some of the thin semi-transparent fabrics in plain rose color for little casements above. Pale ecru ceiling. We would use a green and blue color scheme for the dining room,

with very pale greenish tone to the ceiling. A very delightful dining room paper comes in an all-over design of bluish-green leaves conventionalized for wall above chair rail with same design in bolder drawing below. Deep rose is blended through the lower portion to give a sort of changeable effect.

Scheme for Dark Room.

G. F.—“Our house is one of a row of homes, thus we receive very little light and should like to make the most of the rooms with the eastern exposure, for there is only a four-foot side yard with each house.

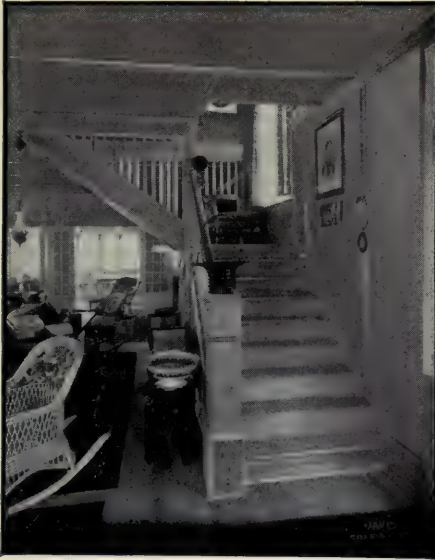
“The parlor and reception hall are my greatest problem. Would you advise me to throw the two rooms into one large living room or have them as they are?

“The woodwork is light chestnut throughout the whole house, but wish to change it and make all white with the exception of dining room. Would you use the dull or gloss paint?

“My furniture for reception hall is green wicker with green leather, while I have a three-piece mahogany parlor suit for the parlor. I have thought of disposing with the suit and using only the regular living room furniture. What would you advise as furniture for that room? Please tell me whether to cover the entire floor with carpet or have hard wood floors and what size rugs to use. I leave the selections of wall covering, window curtains and floor covering for you to decide. There is an oak mantle in the parlor. Would you remove that and have a full length mirror or else a mantle in white?

“My dining room furniture is golden oak and the woodwork chestnut. The rug is an Oriental in brown and red.

“We have thought of having a bay



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window put into the dining room. Would you suggest what kind of window would give us the most light, and also suggest color of wall paper? We are having the opening between the reception hall and dining room enlarged. I should like to use French doors. Do you think it would harmonize?

The den has an Oriental rug of red black and white. The furniture is mission. What colors could I use in that room?"

Ans.—We should by all means take out the partitions between reception hall and parlor, leaving, of course, the vestibule intact. This will give a fine living room with stair in rear, a plan much used at present. This will relieve the cramped and dark appearance very much. The enlarged opening into dining room will help also and by all means, the French doors. Do not throw out a bay in dining room, but fill the space between the two windows already there with additional windows, two or three, as may be, with mullions. This is your main chance for light and must be made the most of. Yes, the chestnut woodwork can remain here as it will tone in with the golden oak furniture and with walls done in pale golden tan and yellow, harmonize with the brown rug and give an effect of sunshine. Cream ceiling, no curtains except a width of yellow sun-dour on the outer sides only, of the two end windows, with a valance of the same running across the entire group.

We would paper the living room walls with a tiffany blend paper that comes in light gray and faint green. By all means lay a wood parquetry floor over the present one and have a Saxony rug with plain center of lichen green with border in darker shade. Paint the mantel white like the rest of the woodwork, tint ceiling white. Your present wicker furniture will be in tune with this scheme and the mahogany suite could be recovered with the cretonne now so fashionable, in green leaves with a touch of rose. A wicker couch upholstered in same cretonne would be a great addition. Your rooms will be a great addition. Your

The dining room floors should also have the wood parquetry, but the second story floors, if good, can have a coat of

water green paint, well hardened, then waxed. The front bedroom walls we would do with an all-over pattern in medium blue and a Brussels rug in blues. By all means, a wood bed with open slats, foot and head. Such a bed costs less than brass and is better style, as metal beds are now passé. The back bedroom should have one of the charming gray and white stripes with pink flowers and frieze to match. The third floor room, a light green and white paper in snowball design. The den must have walls and ceiling tinted white and white woodwork; we should paint that mission furniture white, too, and then upholster it either in red Jasper cloth or an English cretonne that comes in strong red and green. Then, with your red and white rug and one north window, the den will be something more than a dark closet.

A Bungalow Scheme.

I. K.—"I am a regular reader of your magazine and would be glad to get your advice. I am sending a rough sketch of bungalow of craftsman style. Faces east with bedrooms on the south. I want living room and dining room furnished in craftsman, but don't know what to use for woodwork, rugs and hangings. How would fumed oak woodwork with a woodsy or moss green color scheme. I want both bedrooms to have white woodwork. The front bedroom is to be in blue and white, etc."

Ans.—Your ideas seem pretty well settled about your bungalow and in the main, are very good.

There are certain shades of blue that harmonize perfectly with dull greens. You would want to get the right shade, since the opening between is wide. A very pretty effect could be had by using grayish lichen greens in living room and a paper with bachelor buttons and their dull green leaves, in the bedrooms. Do not have your blues too bright, and have the design cover the paper quite closely, so as not to show too much white.

A mossy green rug would be a good choice with fumed oak and craftsman furniture in living room. Curtains of ecru scrim, wall of soft two-toned green. As the dining room would be on the north, we would do the wall in dull yel-



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ANSWERS TO QUESTIONS—Continued

low above the plate rail, with lighter tint on ceiling. Below the rail, golden tan burlaps or an imitation in paper. Curtains of yellow Sun-dure.

A Colonial Interior.

L. L. V.—“We are building a new home and several months ago I ordered from you your “Interiors Beautiful.” It has been greatly admired by all who have seen it and of great help to us. The plans for our house were made by a local architect and several minor changes have been made during the course of erection. Among other things we are trying to copy stairway shown on your page 39. The woodwork is pine. Please tell me whether to stain and wax or varnish it or to paint it and what kinds of mantel to use.

“As to the bedrooms, I think I shall have them all finished white except my own, in which I shall use a handsome dark oak bedroom set that I’ve had for 20 years, and don’t want to dispose of it. I want to use the brown and green combination suggested on page 103 of “Interiors Beautiful,” but don’t know what kind of mantel to use. Please advise me as to mantel, tiles, etc.

“I have been told that nothing ought to be put on new walls for a year or two. Is that true?

“As the stucco will be a greenish gray, what color should the trim be for a Colonial house? We shall use no blinds, but Brenlin shades—what color (outside) ought they to be?

“All these questions are about points that I am being urged to decide about at once and I just couldn’t do it, and I shall greatly appreciate your help.”

Ans.—Taking up first the question of interior finish, inasmuch as you have a Colonial design, we should advise adherence to that style in the main, throughout the house. Especially as your section of the country is so associated with that style. Of course, it need not be carried to extremes.

We think white woodwork should prevail throughout the main rooms of first floor. In the service part of the house the pine can be simply varnished, a finish easy to keep clean and much more pleasing than any paint except white. The

best kitchen floor is linoleum over common boards. The front door can be either white or mahogany. Since the hall is so well lighted, we would have a solid door of mahogany or birch, mahogany stained. In this case we would make the sliding doors into parlor mahogany on hall side, white on parlor side. The mantel white with facings and hearth of dark red molded brick. Thus, with the mahogany stair rail, we obtain considerable relief from the all white finish. Of course, the ideal floors for such an interior, at least in hall, parlor and dining room, should be rich and dark, a mahogany brown stain, shellaced and waxed. In the rear hall and living room, they may be only slightly stained. A mirror door under stair would be perfectly proper, but in that dark corner of little use. We should advise a mahogany hall table on the left of entrance door for hats, canes, etc., with a mirror in Colonial frame over it. The stair with arches is a fine effect and we would make no change. It is a pity, however, that the windows each side of fireplace do not allow of seats beneath them. You can place a hall bench on the right of fireplace and a large growing fern or palm near the other window, but bringing it well out towards stair.

A fireside chair in mahogany and cane should be near the hearth. On the left of stair a pedestal with tall, handsome jar or piece of statuary. The parlor mantel should be white wood in colonial design. The plaster cornice is excellent.

A Correction.

S. W. S.—“In your November number on page 364 replying to question of E. C. W. you mention a Saxony rug 9x14 made to order for \$35.00. Just what kind of rug is this, by whom made and from what dealer can I get one.”

S. W. S., Ans.—The price quoted in the answer referred to, was an error of the printer. It should read \$85.00 instead of \$35.00. This make is called the Hartford Saxony, and is carried by all rug and carpet dealers in large cities. It comes in a variety of plain colors, also in figured and plain centers with figured borders. In the regular 9x12 size it costs \$55.00.

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The Household of Two.



NE of the household problems which is peculiarly modern, and possibly also peculiarly American, is the management of the servantless household of two. Economists are all agreed upon one point, that is that it is easier and more economical to feed a large family than a small one. The labor of cooking large quantities of food is not much greater than that involved in the preparation of a little, while in purchasing the advantage is all on the side of the heavy buyer.

Living from Hand to Mouth.

The problem is partly solved when the wisdom of what used to be called contemptuously "hand to mouth living" is admitted. The craving for freshness and variety is innate with most people and cannot be satisfied when the same articles of food must be served day after day. We are not, like the French, a nation of cooks, giving infinite variety to monotonous food by the addition of sauces, and in the main the American taste is a simple one. This being the case, buying in small enough quantities to avoid monotony and waste is the only thing to do.

The average housewife solves her problem by living on what have been op-probriously called "flat meats." If there is anything more expensive than a diet of steaks and chops, the writer doesn't know what it is. Moreover, with the very common use of gas for cooking, the tendency is to continual frying, extremely bad for the digestive organs in the long run.

The writer would like to give a fillup

to the imagination of the mistress of the household of two, that she may realize the variety that she may have without much effort.

Roasts for Two.

How many of our readers know the possibilities of a chuck roast? Not the huge "streak o' lean and streak o' fat" cut, weighing perhaps eight pounds, but a compact little piece the size of one's fists, thick enough to roast rare and as tender as a porterhouse. Ask your butcher for the eye of the chuck, the thick section lying between the rib bone and the long strip of yellow cartilage peculiar to the chuck. Have him cut off the lower end of the rib, making a standing roast, also the coarse meat above the cartilage. The parts removed you can have corned, or use for a stew, or the butcher will take them off your hands, charging you a higher price for your roast. Even at that it is much cheaper than the rib or sirloin cuts, and quite as good, and although it will serve for more than one meal, few people cavil at cold, rare roast beef, while the remnants will furnish croquettes later in the week.

The easiest way to get a small roast of lamb is to buy four or six chops in a single piece and cook them twenty minutes or half an hour in a quick oven. If you like the fat, get loin chops, otherwise rib chops, which correspond to the prime ribs in beef. With young lamb you can get a good small roast by asking for the chuck, having the neck and breast trimmed off and the shoulder blade taken out, and possibly chops for one day's dinner taken off.

Veal is a little different proposition.

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A house is modern only when it is equipped with those conveniences that reduce the labor and the cost of the housekeeping and increase the health, pleasure and comfort of the family. *Dirt is the great enemy of the housewife.* Practically all the energy of the present-day domestic economy is directed at the conquest of dirt. Modern methods of heating, lighting, plumbing and kitchen management are efficient in proportion as they eliminate dirt.

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Our free book, "The Problem of the Wall," tells all about it and contains color card. Get it from your dealer or

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The shoulder cut is too big for any but a large family, while there is a tremendous proportion of bone to the rib pieces. The breast of veal, with the bones taken out is good and economical when stuffed and rolled. It is particularly good when stuffed with a forcemeat for which odds and ends of ham, salt pork or cold roast pork can be used. And every roast of veal is much improved by having a few slices of fat salt pork pinned to it by toothpicks. A forcemeat is such an improvement to many things that it is worth while to save up all one's odds and ends of pork, ham or chicken and pot them for this purpose. When nothing else is at hand a bread and butter stuffing is much improved by the addition of a little well browned sausage meat. When the quantity of stuffing is considerable the sausage may be merely cut in thin slices and stirred into the dressing. A few oysters are also a good addition.

A few pork chops roasted are very good, indeed, choosing them from the thinnest part of the loin. Have the roast well browned and set it on the platter with a border of fried apples inside an edge of mashed potato. With pickles and an acid jelly you will have a very satisfactory meal.

There is one advantage in these small roasts, which is that they can be cooked with a very small amount of gas. The quantity consumed in the various slow processes, which are needed for the cheaper cuts of meat, is often enough to offset any saving. The sticky and flavorless made gravy which used to be considered indispensable with a roast may well be dispensed with and the meat served with its own juice.

The Possibilities of Fire.

The people who do not insure their goods against fire are few and far between, but a great many who are insured are so careless that they would find it mighty hard to clear themselves of the charge of contributory negligence in case of a fire. The attic and the cellar are danger points in many houses, with their accumulations of loose papers, packing materials, paper boxes and greasy rags.

It is doubtful if it is ever desirable to accumulate newspapers and periodicals.

There are so many people who are glad of the latter and they are so much more interesting when new that they ought to be started on their travels as soon as they have been read. The maw of the Salvation Army always yawns for newspapers, but if they must be saved for packing or any other special purpose they should be tied up in tight bundles. Wrapping paper is another thing that can be passed on, and the few sheets that must be kept for use had better be in some place where ignition is impossible.

The ideal cellar is an affair of stone walls and cement floor, but not all cellars are ideal, and many have wooden partitions and shelving, sometimes even more or less board flooring. Common prudence dictates that the furnace shall be sufficiently remote from wooden fittings to preclude the possibility of coals or hot ashes setting them on fire. Men who take care of furnaces sometimes do curious things, as witness one known to the writer who sifted hot ashes regularly and piled them against a board partition in the warmest corner of the cellar. Providence watched over that house, but it would have made a poor showing to the adjusters in case of a fire.

The dumb waiter, which adds so much to the convenience of a house is often the means of carrying flames from story to story. Unless the shaft has cement walls and the doors are lined with galvanized iron it is a doubtful blessing. One may get a number of ideas as to the prevention of fire by reading the tenement house regulations of one of the large cities, now that apartment houses are classed as tenements, and will probably find that his own premises fall considerably below the standard laid down.

Prompt Notice.

Fire insurance companies are not responsible for goods which have been moved from place to place without their knowledge. The insurance policy should be handed to the agent negotiating it on the day of removal, that the change of location may be recorded. In case of household goods temporarily stored, insurance companies insist that they be housed in a fireproof warehouse. Neglect of these precautions is extremely foolish.

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Perfect finish is the most important requirement of reliable sash cord. With it your windows will work as if on ball bearings, if the window is hung in a frame that does not bind. Imperfect cord will stick and cause great annoyance. Therefore use Regal Sash Cord and be sure of perfect finish and satisfaction.

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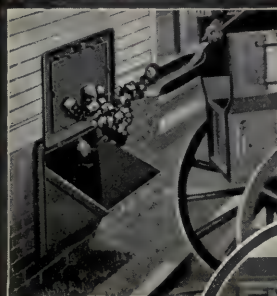
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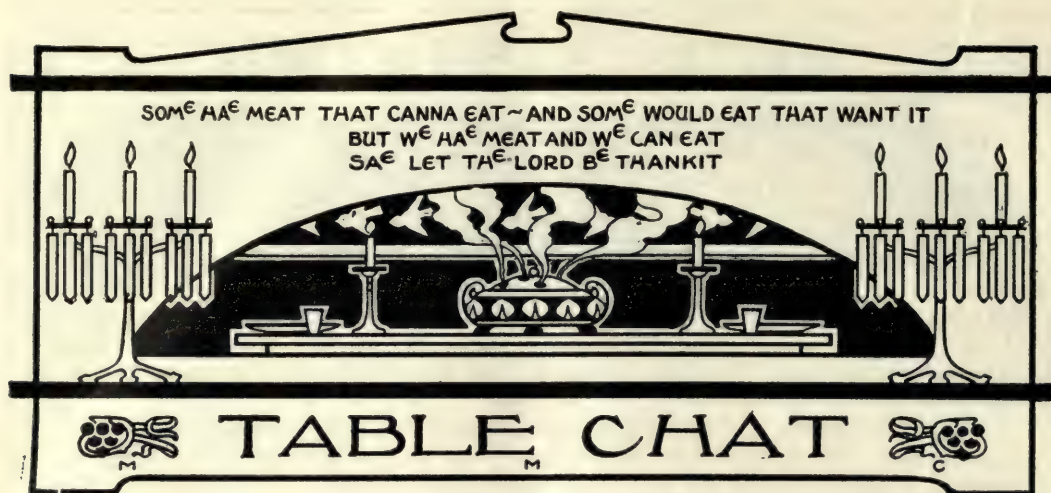


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Fried Cakes and Fritters

By Beatrice d'Emo

FRIED CAKES was the old-fashioned general term for crullers and doughnuts, and sometimes it was extended to include fritters, although the common acceptance of the latter word is a fried cake consisting of some major ingredient mixed with the dough. Properly cooked the fried cake and fritter are perfectly wholesome, the secret being to have the frying medium so hot that the outer surface of the dough is hardened as soon as it is immersed in the boiling fat, then none of the grease can soak in, but the heat will penetrate and complete the cooking. Care must be taken, too, to have sufficient fat to cover the cakes, fresh sweet lard or olive oil being preferred; if drippings are employed they must be well tried out so that there is no discoloration, for whatever is used must be pure white or the cakes will brown unevenly and present an unappetizing, greasy appearance.

To ascertain the proper degree of heat for the frying of cakes or fritters drop a slice of potato in the boiling fat. Count fifty. If the potato browns by that time the fat is just right. If it browns sooner the lard, etc., is too hot, and the cakes will burn before they are thoroughly cooked. If the potato requires more time

to brown the cakes will absorb the fat and be heavy. If a cooking thermometer is used 375 degrees is about right.

A frying basket will facilitate the cake cooking, but cannot be used for fritters. Either, after they are removed from the boiling fat, should be placed on a sieve turned upside down to drain, or on a napkin or piece of soft paper that the surface fat may be absorbed.

An old recipe, and a most excellent one for fried cakes, goes by the title of "Jolly Boys," and calls for three level cupfuls of rye meal, a level cupful of flour, half a cupful of Indian meal, half a teaspoonful of powdered cinnamon, a pinch of salt, a level teaspoonful of soda, two teaspoonfuls of cream of tartar, two tablespoonfuls of granulated sugar (the original recipe calls for this amount of "crush sugar loaf"), two tablespoonfuls of molasses, one well-beaten egg and cold water sufficient to make a thick batter. Stir with a spoon, not rolling, and drop by the spoonfuls in boiling fat. Fry until brown and sprinkle while hot with granulated sugar.

Potato doughnuts are delightfully light, and are made by beating to a smooth cream two cupfuls of freshly-mashed potatoes with two tablespoonfuls each of butter and lard, three cupfuls of

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are valued by all friends of this fruit as the choicest procurable. For sixty years we have bred tomatoes for yield and quality, and our new "globe" shaped sorts are as near perfection as anything evolved. Of ideal shape with solid meat of finest flavor, they stand unsurpassed.

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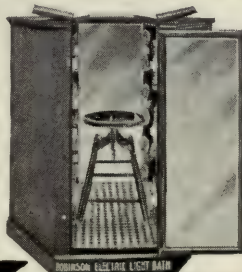
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TABLE CHAT—Continued

granulated sugar, four eggs well beaten and a pinch of salt, then add three cupfuls of sweet milk and four cupfuls of flour with which has been sifted five teaspoonfuls of baking powder and grated nutmeg to flavor. Roll out, and if not stiff enough, sift in a little more flour, then cut in diamond-shaped pieces and fry.

Raised doughnuts are nice enough to repay the cook for the extra trouble they cause. Rub together half a pound of butter and a pound of granulated sugar, then add three cupfuls of sweet milk, two well beaten eggs, half a pint of liquid yeast, powdered mace and cinnamon to taste, and flour sufficient to make a dough as thick as for biscuit. Set in a warm place to rise over night. In the morning roll out and cut in diamonds or rounds, then let rise again for an hour before frying. These may be cut open after the second rising and a teaspoonful of stiff jelly or jam put in the center

of each, then the dough pinched together to hold it in and the frying done in the usual way. If the jelly or jam is added, the mace and cinnamon flavoring may be omitted.

Crullers are sometimes made without baking powder or soda. One recipe calls for the well beaten yolk of two eggs mixed with half a cupful of granulated sugar, then two tablespoonfuls of softened butter are added, and the whites of the eggs which have been whipped to a stiff froth, two cupfuls of sifted flour and a half a teaspoonful of grated nutmeg with a pinch of salt. Roll out to a half an inch thickness—if necessary add more flour—and cut into strips two inches wide and three inches long. Slit each piece to form three strips joined at one end and braid, pinching the ends to make them hold together, then fry in the usual way. Drain, and sift powdered sugar over them.

Nut crullers are made with two well beaten eggs, a cupful of granulated sugar, a cupful of thick sour cream, a teaspoonful of vanilla extract, half a teaspoonful of salt, half a cupful of chopped hickory nuts.

Unless otherwise specified all fritter batter is made about the same. A very good recipe consists of half a cupful of milk, the yolk of an egg, a cupful of sifted flour, a pinch of salt, a half a teaspoonful of melted butter and the white of the egg added last of all after it has been beaten to a stiff froth. For sweet fritters, and those in which fruit forms an ingredient a teaspoonful of granulated sugar may be added to the batter, and for clams and oysters the strained juice of either may be substituted for the milk. The batter in any case after everything is mixed should be thick enough to drop from the spoon.

Apples for fritters should be pared and cored, cut in rather thick slices, then these coated with a mixture of powdered sugar and cinnamon, after which dip each slice in the batter and fry. Pineapple can be fried in slices after being sprinkled with powdered sugar and a few drops of lemon juice, or may be chopped. Oranges should be sliced and the seeds and as much of the white inner skin as possible removed.



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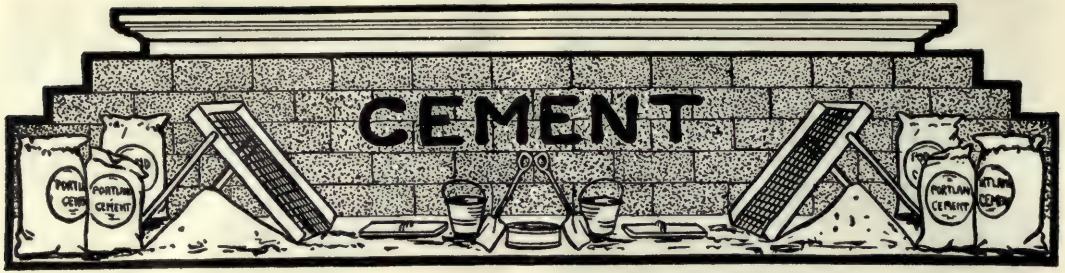


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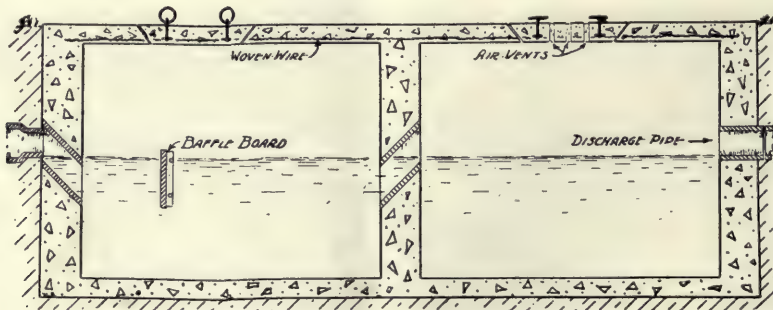


Sewage Disposal for Country Houses

Telling How the Septic Tank May Be Used to Make Modern Convenience Possible

THE general use in country houses of the modern conveniences of bath and toilet has made necessary some effective and inexpensive means of disposing of the sewage. Otherwise the drinking water may in time become polluted and the health of the family seriously endangered. One method of remedying the difficulty and

tank is practically unnoticeable, yet it is best to locate it at least 150 feet away from the house. Choose a spot where it can be sunk to ground level and will be out of danger of flood waters. The tank should be large enough to hold the entire sewage for one day. For a family of eight to ten, plan a concrete tank of two compartments each 4 x 4 x 5 ft. long



Longitudinal Section Through Septic Tank.

one which has given great satisfaction is by the use of septic tank, which is nothing but a long water-tight cistern through which the sewage passes very slowly and evenly. Located underground, it is warm and dark—ideal condition for the development of bacteria, little germs which eat up the sewage and render it harmless in much the same manner as another kind causes cider to ferment. The purified sewage, then merely clear water, may be discharged into an ordinary farm drain tile.

Although the odor from a small septic

Since the top and bottom are each 4 in. thick and division and sidewalls 8 in., dig the pit 4 ft. 8 in. deep, 5 ft. 4 in. wide and 12 ft. long.

If the ground stands firm, only inside forms will be needed. Make two, each 4 x 4 x 5 ft. long. Old 1-in. lumber will do for the siding. The compartment into which the sewage first enters is called the "charge tank." In each end of the wooden form for this tank cut openings for a 5-in. tile with the lower edge of the hole 16-in. above the bottom of the form. Through each of the sidewalls of this



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CEMENT—Continued

same form, 18-in. from the inlet end and $1\frac{1}{2}$ and 2 ft. above bottom, bore 1-in. holes and insert in them greased wooden pegs extending 4 in. into the future side-walls. Likewise in the other form for the discharge tank, cut openings for 5-in. tile, this time with the lower edge of the hole 2 ft. above the bottom.

Mix the concrete one part Portland cement to two parts sand to four parts crushed rock, or one part cement to four parts pit gravel. Place the 4-in. of concrete in the bottom and trowel to an even surface. Immediately set the forms in place so as to leave room for 8-in. division and sidewalls. Fill the forms with mushy wet concrete. At the proper heights insert the 5-in. drain tile through the holes in the form. Be level. By this arrangement of pipes the sewage is kept in the tank to the depth of 2 ft. and the ends of the tile in the charge tank are trapped or airsealed, which aids the activity of a certain kind of bacteria. Likewise, other bacteria are developed in the discharge tank by means of the free circulation of air through the discharge drain tile and holes in the manhole cover.

After the sidewalls are three days old, floor over the top of the forms and prepare to lay the 4-in. concrete top. As molds for the manhole covers, have the tinner make two round bottomless dish-pans, 18-in. in diameter at the bottom and 24-in. at the top. Grease these tin molds and set one on the wooden floor over each compartment. Bore six 1-in. holes in the floor inside the one manhole mold over the discharge tank and insert

in them greased pegs projecting upward six inches.

Place one inch of concrete over the entire floor and at once lay on it, crosswise the tank, strips of heavy woven-wire fencing 5 ft. 2 in. long, or $\frac{3}{8}$ -in. rods running in both directions and spaced one foot. Likewise reinforce the manhole covers. Immediately place the remaining 3 in. of concrete and do not stop until the tank top and manhole covers are finished. Provide two lifting-rings for each cover by setting in them halves of old bridle-bits, or hitching-post rings, fitted with knobs of wire or with nuts and large washers. If a square wooden manhole mold is used, the concrete cover cannot be cast at once. In such a case, carefully remove the wooden manhole form five hours after the top has been finished. Three days later mold the cover the same as for the tin form with this important exception—place heavy paper or cardboard around the edges of the opening to prevent the fresh concrete of the cover from setting to the old concrete.

When the top of the tank is ten days old, lift off the manhole covers, saw openings in the wooden top and remove the forms. In the holes made in the sidewall by the greased wooden pegs, insert $\frac{1}{2}$ -inch bolts and set them with mortar. To these bolts fasten the 1 by 12-inch wooden baffle-board which extends across the tank and breaks up the current of the in-flowing sewage. To carry the sewage from the house to the tank, use 4-inch sewer pipe laid with tight mortar joints. —Concrete Age.

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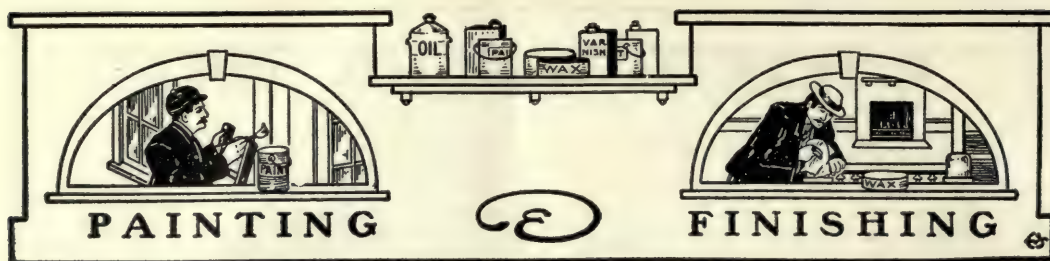
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SHELLAC is too costly for a size, so would advise a coat of oil paint, thinned with benzine; turpentine is better, but it costs more. If the calcimine is to be tinted, make the paint same shade or tint. Otherwise, white paint. The stains which painters have to deal with in their work on ceilings and walls generally are caused by water penetrating through the plaster, carrying with it salts and other chemicals which it has picked up and dissolved during its passage to the surface, and when the water evaporates these chemicals are deposited on the surface, and, for that matter, through the wall wherever it has been wet. The water may be admitted through a leaky roof, or a faulty side wall; or a defective water pipe may be the cause. As a rule, the older the wall, the worse the stain; but even in newly plastered walls, where the plastering has been done under unfavorable circumstances, troublesome stains are often found. Aniline stains are often found on walls, and particularly on ceilings where old decorations have been washed off. They can be successfully treated by applying to the stain a reasonably heavy coat of slacked lime, letting the same remain for an hour or two to destroy the aniline, after which the lime is removed with a broad knife, and the spot is washed well, first with clear water, and then with vinegar. For weaker aniline stains lime water may be used in place of slacked lime.—American Paint and Oil Dealer.

Stains on Brick.

The brown, white and yellow stains which frequently disfigure brick buildings or walls are the result of a saline efflorescence, which may sometimes be removed, according to the *Bibliothèque Universelle*, by washing with slightly ac-

idulated water, when pure water proves inadequate. Prevention, however, is better than cure. The stains are caused by particles of soluble salts, which have been carried to the surface by water, and are then crystallized by evaporation. These comprise sulphates of potassium, sodium, aluminum, magnesium and calcium, the last being the one commonest found, and the one most resistant to rain. Chlorides and carbonates are also often found. These salts pre-exist either in the earth, or in the waters used in manufacture, or in the mortar and sand, the latter being especially the case near the seashore, where sand from the beach is commonly used without precaution of washing with fresh water. The entry of salts into brick may occur during the baking, also, when the coal contains pyrites. Care should be taken to use water of low mineral content, especially as regards sulphates. When only "sulphur water" is available, it should be neutralized with a barium of salt, (the chloride of carbonate.)—Scientific American.

Hard Finish for Soft Wood.

Those of our readers who are called upon to give a hard and smooth finish to soft wood are likely to be interested in a suggestion published in a late issue of the *Woodworker and Art Craftsman*, and reading as follows:

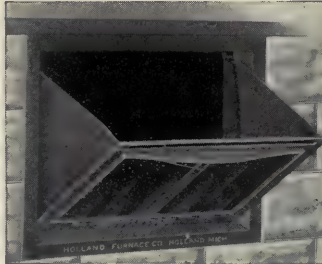
"When only a thin surface is required, a few coats of zinc will make the surface of wood almost as hard as zinc itself. The coating will be a very thin one, and it will yield to light blows, on account of the very soft wood underneath the coating of zinc. To give wood a thick and very hard surface, cover it with a paste made up of: Putty powder, 1 pound; powdered oxalic acid, one-fourth pound; and powdered gum, 1 ounce. Use just enough water to make the paste stiff,



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then spread upon the wood surface, and place aside to harden. If any trouble is experienced in making the coating adhere to the surface of the wood, give the surface a coating of thin glue sizing, or mix a small amount with the ingredients while making the paste. The coated surface should be allowed to remain undisturbed for several days, until the paste has hardened to a degree which will stand any usage it is likely to get.

Cracks in Plaster.

Even the best workmanship and materials are not always a guarantee against cracks in a new plaster ceiling. Settlement of foundations and shrinkage of joists are two insuperable causes. Where only superficial hair cracks result, they may be easily filled with plaster of paris, which will make them impossible to detect under a subsequently applied decoration or papering. But, if the cracks are wide and numerous, filling them is apt to make a patchy ceiling, and is, besides, a tedious task. A better remedy is to stretch cheesecloth over the entire ceiling, pasting it in the same manner as paper is applied. Owing to the accommodating elasticity of the cloth, both existing and future cracks are covered, and the material has besides an interesting texture, which asserts itself through the painting, where that method of decoration is used. If the walls of the room

have a frieze and picture mold, the cloth can be carried down the sides, and its edges hidden under the mold. Where a very rough texture is desired, a heavier cloth can be substituted.

However, because a remedy has been found, one should not be careless about the causes of ceiling cracks. They should be in mind when the frame of the house is put up, and guarded against, as far as possible, by setting timbers and studding in such a way as to reduce shrinkage to a minimum. By this is meant reducing the horizontal wood. Ordinary pine or spruce will shrink about a half inch to the foot across the grain; therefore, as little as possible should be used in that position. The shrinkage of wood on end is almost imperceptible. A well-framed house with studs running from sill to roof and with ledger boards notched in to the studs, would require only the floor beams on the horizontal. A poorly framed house, such as contractor builders usually put up, would have short lengths of studs end to end at each floor, with two inserts of joists to carry the floor beams—in all, about twelve inches of horizontal timber, with a shrinkage of half inch. This, in the whole height of the house might run into several inches and no end of ceiling cracks. This careful framing up is one of the differences between an architect's house and a builder's.

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It is interesting to all engaged in promoting steam and water heating to observe now and then special uses of radiators.

Here we have a case where an owner insists on having a fireplace on the porch of his house—not an uncommon arrangement. During the Fall and Spring the family can enjoy cool evenings on the porch, and when Winter comes the porch

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Another important fact to be consid-



Radiator and Fireplace on Porch of Residence of W. W. Hearne, Wayne, Pa.
D. Knickerbocker Boyd, Architect.

is enclosed in glass. Then the American Radiator, set in the recess at the left of the fireplace, comes into play, and the porch is quickly transformed into a genial sun-parlor, as warm and "comfy" as any other spot in the home. People who have porches should enclose them in winter time with single or double-glass frames and use enough of the reliable radiation to insure steady comfort.

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There are several factors to be considered when planning the heating of a building. Among them are: The location and construction of the building;

ered in the heating of a building, that is very frequently lost sight of, is the capacity of air at different temperatures for retaining moisture. In a moist climate we feel comfortable at a lower temperature; as in England, for instance, where the standard room temperature is 59 degrees F. because there is less evaporation from the body, while in a dry climate, or in a heated room, where no additional moisture has been provided, there is increased evaporation from the body, and we may feel uncomfortably cold, even with a room temperature of 75 degrees, and the throat and nostrils feel dry and parched.



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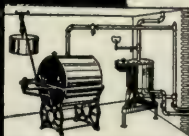
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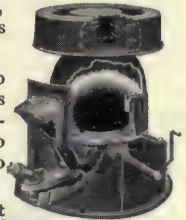
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This is one good reason why the air in a room heated by a water or steam radiator feels dryer than in one heated by a furnace; with the furnace, fresh air is being constantly admitted, carrying oxygen and additional moisture, while with the radiator, on the contrary, the air is reheated, time after time the oxygen is consumed, and the moisture absorbed, and yet the capacity of the air for moisture has been greatly increased.—National Builder.

Helping the Furnace With an Electric Fan.

Many people, many trials and many varying conditions are responsible for even the most trivial discoveries. The use of the electric fan is, after all, only an outgrowth of Adam's discovery that even a hot breeze had a cooling effect on his perspiring brow. We don't know whether anybody ever fanned a breeze across hot stones to warm a room, but, somehow, somewhere, some bright person has thought of blowing air (with an electric fan) across a radiator to keep a comfortable temperature during the cold weather. The scheme is good. We tried it and we know.

We say tried it, and we did, with good results. Our office boy tried it, too, but he had the principal of the thing wrong. The cold spell had let up to a certain extent, the room was hot and the boy tried to cool the radiator off by letting the fan blow on it. The scheme looked good to him. Of course, the room got hotter, which, after all, only demonstrated the efficiency of the scheme; the radiator was cooled a lot faster; i. e., it radiated heat a lot faster, and the temperature of that room rose like a rocket.

But to get on the track again; this radiator scheme is not the only idea in connection with making cold houses comfortable in winter. A fan can be put in the cold air intake of a hot-air furnace, and the circulation will be improved so much that you get a rush of warm air, whereas you may only have had a gentle current before. It gives more flexibility to your heating system by enabling you to crowd it a little when necessary; and it reaches every room in the house.

Helping your heating system is only

one of the many winter uses for the electric fan. Like the man in the fable who blew on his soup to cool it, and again on his hands to make them warmer, the fan is a means of making the temperature endurable, whether it be too high or too low for comfort.—Electric Magazine.

The Clean House.

Before the advent of the vacuum cleaner, the only really clean house was the new house.

The vacuum cleaner has not only revolutionized cleaning methods, but has set a new standard of cleanliness, robbed housework of half its drudgery and demonstrated that it is a real economy.

If you were to tell the good housewife, after she had spent two or three days cleaning her home from cellar to garret that it still retained fifty per cent of its dirt and dust, she would be righteously angry. Your statement, would in the main, be true. The broom and duster method simply stirs up germ laden dust allowing it to settle elsewhere.

To prove this statement, watch the careful housewife as she sweeps and cleans her home in the old broom way. She thoughtfully covers up the bric-a-brac and piano with sheets and newspapers so as to protect them against the settling dust. After sweeping the rugs and carpets she dusts off the furniture, allowing the dust to settle back again, and then carefully removes the sheets and newspapers.

While sweeping she has been breathing the germ and dust laden air.

With this method of cleaning it is not necessary to cover up bric-a-brac or piano because the vacuum cleaning tool raises no dust or germ laden dirt.

When you wish to clean the room in a home in which a good vacuum cleaner has been installed, you attach one end of the light rubber hose to the inlet. The other end you attach to a light aluminum cleaning tool. You then turn on the electric switch and start the machine in the basement. As you move the cleaning tool over draperies, floors, or furniture, dust, germs and insect eggs are sucked into the lips of the cleaning tool and carried by force of suction into the separator tank in the basement.



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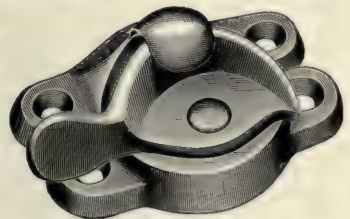
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SPLINTERS AND SHAVINGS

Comparative Cost of Building and Building Material.

Everyone, about to build, is desirous of first ascertaining as near as possible the total outlay he will be obliged to make. The first step after selecting the design is to multiply the total cubage as given with each design by the cost per cubic foot in your section. You will then be able to get an idea if it is possible to keep within your appropriation. Next consult a local builder, one who is accustomed to putting up the class of building you desire. There may be certain governing conditions in your neighborhood with which he is familiar and you are not. He will take the cubical contents and the design as submitted, together with instructions as how you wish the house finished, and give you a very close preliminary estimate. Then when he receives the working drawings, details and complete specifications his figures may be gone over and verified. Of course, if the builder has the final drawings from the first he will be able to give at once an exact and final figure.

The two principal factors are labor and material. In some places the first factor, labor, plays the more important part. Wages are high and hours are short. For example: in the vicinity of New York City, union labor is well organized and the mechanics receive the maximum wage for the minimum number of hours. In Central and Western New York state, carpenters and masons get a modest wage and some materials, requiring a long haul, are expensive. The lumber sections of the northwest and some parts of the south give a plentiful supply of cheap material and where labor's demands are not exorbitant at the same time, we find here the most favorable conditions in which to build cheaply.

To get down to facts, we shall compare the prices obtained from each quarter of the country; prices obtained on the same house and specifications. To test this the plans and specifications of a house were

sent to architects all over the country. There was a list of questions to be answered and the costs of various materials sought. The replies were carefully averaged and the results are given below. We give prices, both in lump sums and per cubic foot:

We have covered in the above list a wide range of territory; the districts mentioned are characteristic of all sections. The New York section heads the list with the Northwest Pacific Coast at the foot, due to the peculiar conditions mentioned above. Prices, however, may vary in each section. We have known of two houses built from the same plans and specifications, one in Flushing, Long Island, and the other in Esser County, New Jersey, in which the cost at Flushing was 10 per cent less than the Jersey cost. Transportation had much to do with this variation. — The Builders' Guide.

Settlement After Abandoning Work

A building contract provided that, on the certificate of the architect of the default of the contractor, the owner, after notice, could provide the labor or materials and deduct the cost thereof from any money due or to become due, and that, on the architect certifying that the default was sufficient ground for such action, the owner might terminate the employment of the contractor and complete the work under the contract. The contractor abandoned the work without legal cause. The owner gave notice, referring to the architect's certificate of the contractor's default, and then notified the contractor that he terminated the employment and would enter on the premises to complete the work. Held that the contractor could recover the contract price, less the amount paid, plus the cost to the owner of completing the work.—*Seiger vs. London*, 126 N. Y. S. 256.

Use of Brick in American Architecture.

Considered from the point of view of beauty, brick would seem to occupy a



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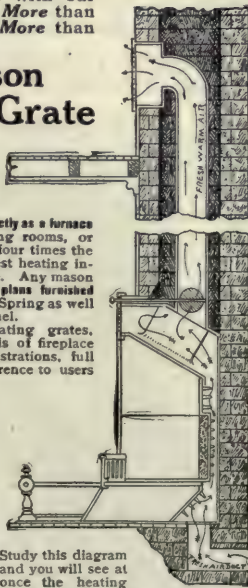
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SPLINTERS AND SHAVINGS—Continued

unique position among the structure materials available for the creation of beautiful buildings. Further analysis discloses, among others, the following interesting points:

Brick is made in reasonably small units, so that in the case of many modern buildings, at least one hundred thousand of them show on the exterior. This, together with the varying shapes and sizes now obtainable, make possible an almost infinite variety of form and pattern, thus giving full scope to the imagination, ingenuity and skill both of the designer and of the workman.

Brick, moreover, is now made in almost every conceivable color and shade, the permanency of which is unequaled by hardly any other building material; with such a "palette," therefore, at one's command, and by a skillful use of color, the brick builder of today can readily add to his design that living touch which the painter gives us in his painting.

Brick may also be counted unique in the fact that it requires for its structural efficiency the use of a very considerable amount of material of quite another kind and color, namely, mortar; and, further, that this material must of necessity show in the form of a joint to a more or less degree in the fact of the finished wall. A mistaken idea has prevailed that the mor-

tar joint is a blemish that should be suppressed as far as possible, or be colored to match the brick. We find, however, that the designer of today seizes the very opportunity afforded by a mortar joint to introduce into his wall another element of color and pattern.

The word "texture" has lately come into use in connection with brickwork, and, strange as it may seem, this word has a very plausible application; for the builder of interesting brickwork has much in common with the weaver at the loom as far as resulting color effect goes. Just as the weaver, with his threads of varying sizes and colors, produces a never-ending variety of useful and beautiful fabrics, just so it is possible for the brick builder, with his bricks and joints of many colors and sizes, to weave new ideas and combinations into his work, all in beautiful and imperishable patterns; and this applies to all brick.

Just as the fabric charms and delights the eye, and at the same time protects man from heat and cold, and performs a thousand other useful functions, so the beautiful wall of brick, exemplifying man's ingenuity and his artistic skill, forms also the protective structure of the buildings erected for his use. Brick, therefore, would seem to fulfill to a very high degree the requirements of an ideal architectural material.—"Don Barber."

Park, Porch and Pergola.

To the mind of not only the writer, but also several others talked to at the time on the subject, one of the strongest suggestive effects of the great Chicago clay show was an impression that we have been neglecting many opportunities to use brick and other clay products in beautifying the landscape of home, garden and park. There was something very appealing about the many walls, piers, pergolas and garden and landscape effects shown.

The dead gray color of concrete in porches and columns paled into insignificance when brought into mental comparison with the soft but rich colors shown in the walls and piers at the clay show, and then to complete the desire for brick piers and parapets in porches, there were those terra cotta steps.

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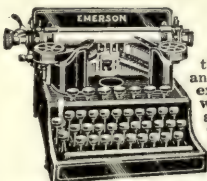
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New Booklets and Trade Notes

Catalog B, of the Benjamin Electric Manufacturing Co., Chicago, is devoted principally to the **Wireless Clusters** and **Lighting Specialties** manufactured by this company for use in commercial and public utilities. The Single Unit Fixtures, however, will be found of special interest to house builders, comprising as they do the very latest in illuminating data.

* * *

The Higgin All-Metal Window Screen is most convincingly set forth in their recent booklet—**House Comfort**. Not only is the booklet convincing, but it is most attractive. The testimonials given are certainly of a high order. While House Comfort in summer is thus provided by the use of the **All-Metal Screen**, it is insured in winter by The Higgins **All-Metal Window Strip** illustrated and described in a companion booklet. These booklets are sent free on request by the Higgin Manufacturing Co., Newport, Ky.

* * *

The Kelley Island Lime and Transport Co., Cleveland, O., issue a booklet describing their product,—the Tiger Brand, White Rock Finishing Lime. A perfect finishing lime, producing a clean, white wall free from pits, blisters, cracks, etc.

* * *

The Turbine Ejector Pumps, manufactured by the Fischer-Sweeny Bronze Co., Hoboken, N. J., are described in a booklet received by us. These pumps are designed to meet the requirements of vacuum heating systems for a simple, efficient and reliable vacuum pump. They are controlled by an Automatic Switch and Vacuum Regulator, which starts and stops the pump.

* * *

The American Hardware Co., Great Britain, Conn., send us their new fall catalog of specialties, including the **Corbin Door Checks** and **Springs**, the **Corbin Glass Knobs** like beautiful jewels in fine

settings, the **Corbin Night Latch**, **Corbin Door Handles** and **Pin Tumbler Cylinder Locks**—their Bronze Butts with Fibre Bushings, and many other features, in which this firm are noted for superior merit and beautiful workmanship.

* * *

The **Mechanical Properties of Redwood** is the title of an interesting pamphlet sent in by the United States Government Department of Forestry. Redwood is extensively used on the Pacific coast, both for railroad ties, paving blocks, etc., and in all kinds of construction. It has the quality of resisting fire and immunity from decay.

The Cradle of the Deep,

By Jacob Fisher, a new author who shows considerable dramatic power. The story begins with the wreck of a South Pacific liner, bound for Manila. An opening for which the Titanic disaster may have furnished the suggestion, but which is handled with considerable strength. The adventures of Eleanor Channing, a passenger, and John Starbuck, second officer, herewith begin and fearsome are the perils through which they are conducted to escape at last unharmed with a wedding on ship deck to end up with. L. C. Page & Co., Publishers, Boston. Price, \$1.25.

Naomi of the Island,

By Lucy Thurston Abbott, is a story of the New England coast of fisher folk and the rocks. One is reminded of Cape Cod Folks and Vestry of the Basins — those perennial fountains of pleasure—in the character drawing of these quaint people and the manner in which the homely detail of their lives is invested with interest by the author's art. Though a new writer, the author possesses potent possibilities, and a delicate, pervasive humor which wins interest. The development of Naomi from a childhood so adversely handicapped to a charming girl, makes a charming story. L. C. Page & Co., Publishers, Boston. Price, \$1.25.

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ON HOME BUILDING

WITH WHICH IS CONSOLIDATED

THE JOURNAL OF MODERN CONSTRUCTION IDEAL HOMES MAGAZINE

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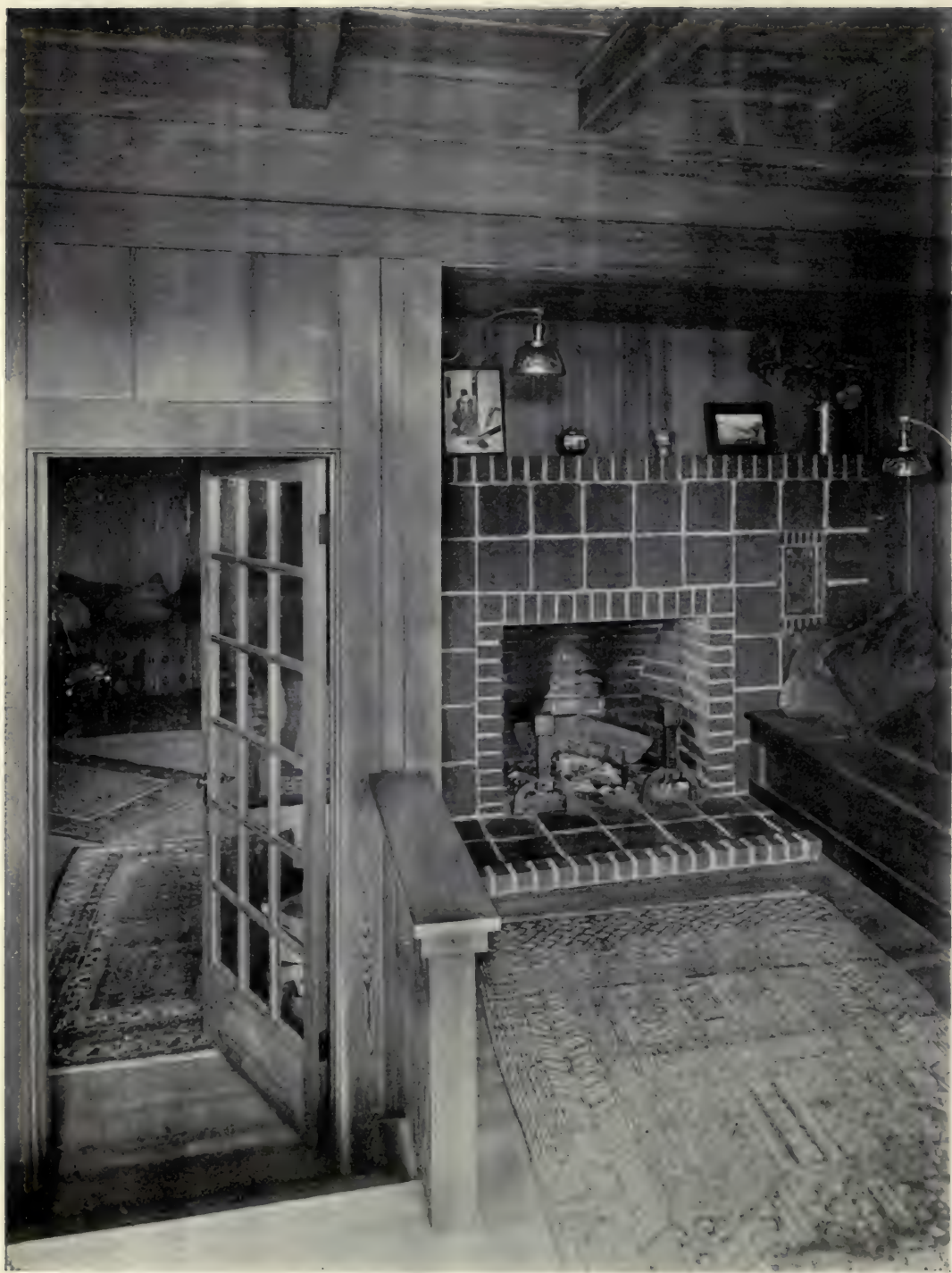
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KEITH'S MAGAZINE

VOL. XXIX

FEBRUARY, 1913

No. 2



Sylvanus B. Marston, Architect.

COTTAGE LIVING ROOM FURNISHED IN ACCORDANT TONES. (See Note A.)

The Decoration of Our Homes

By Una Nixon Hopkins

(In Two Parts) PART I

“**P**ROBABLY no art has so few masters as that of decoration,” says a well known house decorator.

The art of decoration, as applied to the furnishing of modern interiors, has been given very little consideration by

the majority of home makers, until a comparatively recent time. Further, the art is difficult. It must be based on utility and fitness, have for its ideal beauty, and always be subject to architecture.

The decoration of the house in the sense here considered has to do with

it more especially in the homely sense—the coloring of walls, treatment of woodwork, selection of rugs, furniture and hangings.

Many women show great natural ability in the furnishing of their homes. The fact of having a home is an inspiration to most women to make it beautiful.

But the success of an interior depends largely on color. And every one does not recognize good color intuitively. Those who do not would do well to carefully observe the color combinations in nature, for color is largely a matter of observation.

There are two different methods, as regards color, of furnishing an interior—one by contrast—the other by accordance—the first is the simpler way, the second the more perplexing. As it is more difficult to paint a yellow jar con-

taining yellow flowers against a yellow background, so it is easier to paint a yellow jar, filled with white flowers against a blue background.

Note A.: In the cottage living room illustrated, the walls are a rich buff, the woodwork is a nut brown, while the furniture, rugs, hangings, etc., are variations of these tones. There are touches of old blue and several pieces of brass to make the scheme interesting.

It will readily be seen that if the woodwork of a room is one tone of brown, and the walls still another, the whole room being furnished in variations of the same tone—that the scheme will call for more ingenuity than as if the woodwork were brown and the wall say, green, with perhaps still another color. It is not only difficult to accord varying tones of the same color, but here and



A ROOM WHICH IS LUXURIOUS—YET NOT OVER-FURNISHED OR CROWDED. (See Note B.)



Arthur S. Heineman, Architect.

"A CURTAIN IS A TELL-TALE THING." (See Note C.)

there must be introduced in small proportions enough of other colors to make the color scheme interesting. And this proportion of color is of the greatest importance—one tone must prevail when the room is furnished in accordance, and one color when it is furnished in contrast.

Note B.: While part of this room is in dark tones and part in light, the dark tones prevail, and thus the "spotty" effect is prevented.

The strong lights and shadows are more apparent in the picture than in reality.

To use equal proportions of several tones in a room will make it appear spotted. This proportion of color is another interesting thing to study in nature, especially in flowers, and their coloring is nearly always adaptable to house

decoration. Worth once said that he took his color combinations from flowers and leaves and then was never afraid of the result.

The careful gradation of color may make or mar an interior. "On gradation," says Ruskin, "the preciousness and pleasantness of color depends, more on this than on any other of its qualities; for gradation is to color what curvature is to line."

Relative to the careful gradation of color: Supposing one were furnishing a room in tones of brown. The curtains here should be a deep cream color, for to make them white would be to skip notes in the scale of color. It is not wise to use white with the dark tones ordinarily used in living rooms.

Just here let a hint be dropped—a curtain is a tell-tale thing. Good taste—or

the lack of it—is apt to show in the selection of curtains. It may be a person of some discernment who, when you “show him a mouse’s tail, will guess with metaphysic swiftness at the mouse,” but paraphrasing the poet, show one of taste your curtains and with speed no less he’ll surmise sagely of your dwelling house.

Note C.: Here is a modest little room made charming by the curtains. A simple net and a pretty two-toned cretonne, which matches the wall, have been used with pleasing effect.

Many a room is also ruined in effect by combining white woodwork and dark walls. Where the woodwork is painted white the walls should be light, otherwise this law of gradation of color is broken.

There are not many colors to consider for an interior—“greens, yellows, browns and pale copper,” says Morris, “but not even yellow unless the wall space is well broken up.” When the space is broken and there is need of a light sunny quality, yellow is excellent, modified by some other color. The coppery tones are very beautiful.

A strong red room was never intended to be lived in—in nature red is very limited, and though “art and nature are divided by enormous chasms,” it is well to appropriate to very day use the hints she gives us. The atmosphere of simplicity in a house may be furthered by color—or contrarywise. Browns and greens, for instance, make less pretension than do grays or the coppery tones.

The problem of making a small house appear more spacious or a somber house more sunny in these days of apartments and transitory homes, is one that continually confronts us, and these miracles must largely be wrought by color. In a small house where a feeling of space is desired, one color scheme running throughout the house will accomplish the

desired effect, and light colors make a home appear larger than dark ones.” Let the rugs be large, almost covering the floors, so as to extend the size of the floor; and let the curtains be of the same color as the walls, not to break the color of the wall space is to extend the apparent size of the room. There never was a time, perhaps, when so little excuse existed for inappropriate interiors as at present. To begin with, our accomplished architects nowadays give such good beginnings: well balanced, finely proportioned rooms.

Note:—The hall illustrated has been made charming by the architect’s skillful management of detail. The fireplace is original in design and there are just the right number of things on the shelf. (See frontispiece.)

The shops are filled with skillfully designed fabrics and wall papers, suited almost equally to either the fat or the lean purse. So much has been said and written regarding the beauty of simplicity that there are those who have come to think that they are in danger of breaking the law if they undertake to furnish a house of moderate size with more than a few hundred dollars. The truth is, an interior in which a great deal of money has been expended may be very simple in effect, or one that has been furnished along strictly economical lines may appear fussy and complex. It is not an easy matter to make an attractive home with either extreme of purse, and to do so successfully demands a certain kind of genius—not the ability of the painter, but genius nevertheless.

To make a home truly beautiful on a very limited amount of money presupposes knowledge. The buying of oriental rugs and fine mahogany insures good line and color, while in the purchase of inexpensive furniture and low cost floor coverings, a large amount of judgment and discretion must be brought to bear.

A Well Planned House for \$5,000

By Charles Alma Byers



A WELL PLANNED TWO-STORY HOUSE BUILT ON MT. WASHINGTON, NEAR LOS ANGELES, CAL.



THE accompanying floor plans and photographs illustrate an unusually well-planned two-story house recently built for \$4,700 on Mount Washington, near Los Angeles, California. It is of simple, pleasing architecture; without unnecessary structural ornamentation, and was especially designed to be roomy, and at the same time cozy and homelike. It possesses three porches, from any one of which, on account of the house's elevation, is afforded an excellent view of valleys and snow-

capped mountains; and when its immediate surroundings shall have received the attention proposed the home will closely approach the ideal in every respect.

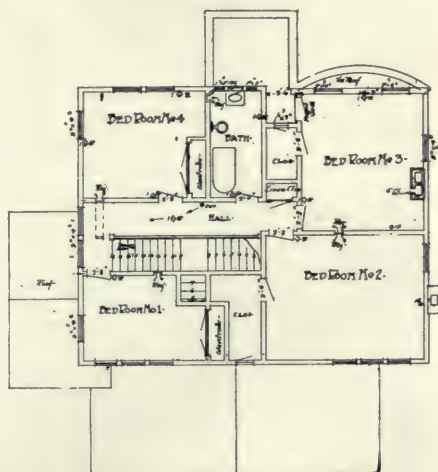
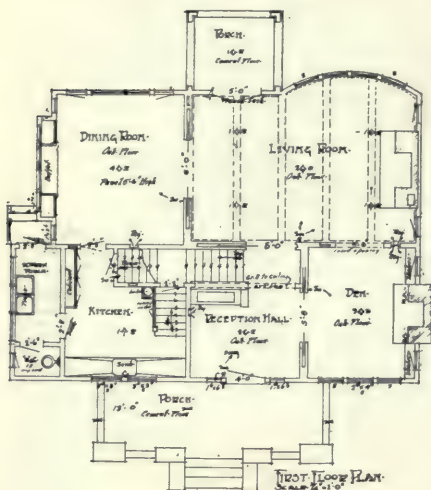
The frame of the house is of wood, consisting of California redwood and Oregon pine, while brick composes the foundation, the chimneys and the porch pillars, which are of massive proportions. The front and side porches have independent inverted V-shaped roofs, unceiled, the rafters and crosspieces show-

ing, while the roof of the rear porch is converted into a small balcony. Two small dormer windows help to break any possible monotony of the roof proper, and lend cheerfulness to two of the bedrooms on the second floor. The house is provided with numerous windows, single and in groups of twos and threes, and the entrance, which leads from the center of the front porch, is made the more inviting and dignified by two full-length panel windows on each side of the half glass door. The floor of the front porch is of concrete, forming a natural

continue on to the second floor or descend into the kitchen. Straight before the front door is the entrance to the living room, while to the right is a sliding door that opens into the den.

The den, which also serves as the library, possesses a large brick fireplace of interesting workmanship, with built-in bookcases on each side. It is furnished with comfortable chairs, and is otherwise designed to be inviting and cozy. In fact, it is one of the most enjoyable rooms imaginable.

The living room is twenty by twenty-



termination for the cement walks, while the floors of the side and rear porches are of wood. The exterior woodwork is painted a rich brown, which blends well with the brickwork.

The house contains reception hall, living room, dining room, kitchen and den on the first floor, and four bedrooms and bathroom on the second floor.

The reception hall, although comparatively small, is unusually well arranged.

The stairway, which leads from it, is partially concealed by an interestingly designed railing, which extends entirely to the ceiling, and which forms the back of a cozy built-in seat. An interesting feature of the stairway is that it leads to a midway landing, from which one may

eight feet, the largest room in the house. An interesting feature of this room is a broad curve in the outer side wall, which is utilized for a series of four windows, and the dimension given for width refers to the broadest point in this curve. The room contains a total of six windows, besides a glass door which leads to the rear porch, giving it a flood of sunlight at nearly all hours of the day. There is a fireplace in the room, with a broad hearth and a mantel of cream colored brick that extends entirely to the ceiling. The ceiling is beamed, and the lighting fixtures are of simple, effective design.

The dining room is connected with the living room by a broad arch. Like the latter, the dining room is also illuminat-



THE LIVING ROOM.

ed by many windows. The buffet is the most important feature of this room, and the series of four half-windows above it of leaded art glass makes it especially interesting. The arrangement of cabinets and drawers is also unusually good, showing considerable originality.

The color scheme of the reception hall, den, living room and dining room deserves special mention. It is one of

striking harmony and effectiveness. The woodwork is finished throughout to resemble Flemish oak, and the plaster of the walls and ceilings is tinted shades varying from rich cream to chocolate. In the reception hall the walls are buff and the ceiling cream, a combination that is also duplicated in the living room and dining room, while in the den the walls are chocolate and the ceiling buff. These



THE DINING ROOM, WITH BUILT-IN BUFFET.



The Stairway.

shades, aside from being harmonious, give the rooms an appearance of richness and warmth. The floors in all of these rooms are of hardwood.

By referring to the floor plans it will be noticed that the kitchen occupies one of the front corners of the house. This

arrangement is for the purpose of converting the so-called rear porch into what is really a little tea porch, from which, on account of the house being located on the brink of the hill, is afforded an excellent view of sloping hillside and valleys. It may also be explained that the side porch is screened and adjoins the kitchen.

The second floor is devoted to bedrooms, four in number, and the bathroom. The woodwork of each of these rooms is enameled white, while the plaster of the walls and ceilings is tinted delicate colors, two in shades of green, one in blue and the fourth in pink.

The furniture of the home consists largely of mahogany, much of it being of rare antique make.

In addition to the two fireplaces, the house is provided with furnace heat. It is substantially built throughout, and is in every respect designed to be a durable and comfortable home. It should be satisfactorily duplicated in almost any locality for from \$4,500 to \$5,200.

An Attractive California Bungalow

By Lela Angier Lenfest

THIS inviting and home-like bungalow in Rock Ridge Park, Oakland, is well adapted to its surroundings. Only twelve minutes from the business center of the city, its environment has all the space and outlook of the country. It stands on rising ground not far from the entrance to the park and overlooks the bay.

The exterior is of brick clapboards and shingles, with "klinker brick" columns and chimneys. The porch is built as an extension of the roof, but is so arranged that no room is entirely without sun,

which is frequently the case in bungalows of this style.

Another interesting feature of this artistic house is the loggia on the roof in front made accessible by the French windows in the dormers.

The shingles and trim are stained a dull brown which tones well with the brick.

The well-arranged shrubbery, parking planted with ivy geranium and well kept porch plants add to the general attractiveness.

From the porch and loggia one ob-



HOME-LIKE BUNGALOW IN ROCK RIDGE PARK, OAKLAND, CAL.

tains charming, restful views of Rock Ridge rising to a height of seven hundred feet and clothed with stately pine and eucalypti. To the south are the green park-like stretches of the Claremont County Club golf links.



VIEW FROM THE PORCH.

Planning the Small House

By Louise Shrimpton



HOUSE OF TAPESTRY BRICK AND PLASTER. (House No. 1.)



IN working out plans for a small house the first task of the home builder is to study the site. The principal rooms should face the sunshine or the view, and irregularities of level should be taken into account. A plan on paper may seem perfect, while of two houses built from it on different sites, one may prove cheerful and inviting, the other bleak and dismal. This important point of relation of site and plan decided upon—a point often ignored by home builders—the relative size of rooms, the lines of travel throughout, and the disposition of service quar-

ters should be considered. Also the individual preferences of home builders—their heart's desires—must if possible be realized. Fireplaces are the hobby of one builder; another desires two bathrooms in even the smallest of plans; others wish several porches large and small. To reconcile desires and their cost is a problem requiring careful balance and selection, and sacrifice is a necessary part of the undertaking. Probably a small house was never built that completely satisfied its owners.

The plans published in magazines are proving exceedingly helpful to home

builders. Caution must, however, be used in adapting them to a particular site. If a plan is liked, it may sometimes, for instance, be turned around, with slight changes of hallways and entrances, facing the sunlight or a pleasing prospect, instead of the street.

In adjusting the relative size of rooms the hall is found negligible. An imposing entrance and hall in the small house are not in the best of taste, and prove incongruous, besides taking up valuable space. A large living room, however, is desired by the majority of home builders, and dining room, hall and service quarters may to a certain extent be sacrificed to it. In planning second floor space it is no longer the custom to give the guest of the night the sunniest and largest room. The two house owners are given the most desirable location, and their room is planned with two closets, or with one that is unusually large. A small but cosy guest room is provided. Possibly a small bathroom connected

with it is so placed as to be available for the family when there are no guests.

Lines of travel in the plan, as well as the disposition of service quarters, depend largely on the factor of domestic service. If there are one or two resident maids, the kitchen must be isolated; to insure comfort and privacy for both family and servants, there should be a rear staircase, the servant's room, connecting with it, placed directly over the kitchen on the second floor, or else on the third floor. Communication through hallways between kitchen and front door is insisted upon by some home builders, while to others the necessity of the maid's passing through the living rooms to reach the door seems an unimportant matter. Entrances and telephone should, however, be within easy reach of the kitchen.

From the housemistress who does her own work with the help of the modern domestic appliances, or who engages service by the hour, an isolated servant's room is of course unnecessary. The



HOLLOW TILE CONSTRUCTION—COST \$6,000. (House No. 2.)

kitchen needs less isolation—perhaps the butler's pantry is omitted—and lines of travel may conveniently pass through living rooms.

In planning service quarters, whatever the service, the kitchen should be kept simply a workroom, not a runway. A cool room opening from entry or rear porch, or an entry containing space for refrigerator and stores, should be planned to keep tradesmen and iceman from tramping through the kitchen. Built-in cupboards often take the place nowadays of pantries and storerooms, so that little walking back and forth through the kitchen is necessary. In time, doubtless, the cook will sit in the center of the kitchen on a high revolving stool, from which she is able to reach cupboards, stove and sink, and cooking and dish washing will be reduced to well known

formulas. Meanwhile the old fashioned rambling service quarters, especially futile in the small house, are a thing of the past.

A small house in which the rooms are large, and the question of cost was not a stringent one, was built in 1911, the plan worked out by the home builders from ideas obtained in magazines, though an architect was employed. The cost, complete, approximated \$10,000.00. The exterior is of tapestry brick and plaster over metal lath.

The first floor plan of this (number 1) house shows a pleasant porch, a large living room, opening from it with French windows, containing a fireplace, dining room, panelled in ivory painted wood-work, butler's pantry and kitchen, besides a good-sized hall. The telephone is in the hallway beneath the stairs, near the kitchen. The kitchen quarters are especially convenient, with built-in cupboards, and ironing boards built into the wall, with ice room off the porch and a tin closet. Laundry, vegetable cellar, furnace room, etc., are on the cellar floor. The second floor rooms are uncommonly large and include a sitting room with fireplace. Closets are so contrived that floor space is not cut up and there is a good sized linen closet. There is one room finished in attic space.

A house plan cleverly adapted to the use of a small family with one servant is shown in our No. 2 plan, designed by J. M. Scrafford, architect. The house cost about \$6,000.00 and was built in 1911. It is of hollow tile construction, plastered. Situated on a corner lot, the entrance is at one side. The large porch commands a woodland view opposite and is uninvaded by the agent or chance guest. Since the front door is near the kitchen, it is easy for the maid to answer the bell. The living room is large with big fireplace and built-in bookcases. A small "den" adjoining is used as writing



Fireplace and Glimpse of Enclosed Porch of House No. 2.

and telephone room. The pass pantry, containing sink, has cupboards with adjustable platter shelves close together, and narrow cup shelves. The woodwork here and throughout this floor is of cypress, stained a warm brown. A built-in cupboard in the kitchen has hooks for hanging saucepans on, and compartments for stores, and there is a preserve cupboard over the cellar stairs.

On the second floor, space in the sloping roof is utilized for closets, an unusually large number of them. At the foot of the attic stairway is an ingeniously contrived linen cupboard with drop fronts to the compartments, forming ledges when lowered. The maid's room, reached by the rear staircase, is on a slightly different level from the rest of the floor, and further isolated by two doors. This plan is well adapted to the ordinary suburban dweller, with its provision for one servant, its large living room and pleasant outlook.

The semi-bungalow type of plan is shown in another suburban house built in 1911, the cost being about \$4,000.00. The home builders were themselves the designers and superintendents, also introducing built-in features of their own design. Here the hall is sacrificed outright, a tiled vestibule protecting the entrance. The living room is unusually large, and opens through glass doors into an enclosed and screened porch. The porch, connecting with the kitchen, is used as a breakfast room the year round, as well as a living room extension, while from it is seen the prospect of most interest. At one side of the living room, the dining room is sunny and of good size, and is furnished with corner cupboards designed by the house mistress. The kitchen cupboard is well planned, and the pass pantry convenient. The rear porch has a small closet built into the wall to hold brooms, ash and garbage cans.



Semi-Bungalow Type. (House No. 3.)

The plan was designed to make house-keeping easy for the housemistress, and to this end the family sleeping rooms are on the first floor, separated from the living room by a narrow hall. A bathroom is between the two rooms. The staircase leads from the living room, connecting from the first landing with a short flight of steps into the kitchen. On the second floor is a wide hall used as a sitting room, two good sized sleeping rooms and a bathroom. One of the rooms is occupied by a college girl who helps solve the domestic problem.

Our small house plan number 4 was designed by the artist potter Adelaide Alsop-Robineau, for a small family. The contractor's estimates were \$3,700.00, but the actual cost somewhat exceeded this amount. A small porch, with seats, is built out from the main plan, while coat cupboards are on each side of the entrance.

The house place, with its wide doorway, is practically one large room, but comprises living room, music alcove, and dining room, the stairway being just beyond the dining room entrance. There are two fireplaces of tapestry brick. Built-in furniture is a feature of the plan. There are high-backed seats of interesting design around fireplaces and beneath windows. The cupboards in pantry and kitchen have small paned glass doors,

decorative in effect, built in red oak as is the other woodwork throughout the house. The pantry sink, of silvered copper is in a copper covered ledge. In the kitchen the sink, placed at the proper height for its owner, is provided with a shelf on each side, covered with copper, and adding to the cleanliness and attractiveness of the room, while a built-in kitchen cabinet is above at one side.

bedrooms and a bathroom, with small linen closet. Built-in chests of drawers of depth varying with the pitch of the roof fill wall spaces that would otherwise be wasted, and dressers and chiffoniers are thus dispensed with.

This small house plan is eminently fitted for a housewife who likes cozy quarters and built-in furniture and fittings. Planned with special reference to



DESIGNED BY ADELAIDE ALSOP-ROBINEAU. (House No. 4.)

The cool room near the kitchen entrance has a window through which ice is delivered, and the refrigerator is raised from the floor on a low platform, which makes it more accessible. The cellar floor, nearly at the ground level on one side, contains a trunk room, since there is no attic in the house plan. A preserve room, dark since ventilated only by a shuttered slit in the wall, is a special feature. Laundry, with stove, and the furnace and coal rooms, occupy other cellar space.

The second floor plan comprises three

ease in housekeeping, it is also attractive and livable, and the kitchen arrangements are fascinatingly pretty. The foundation wall of rough hewn stone, and the retaining wall and steps, also of stone, add much to the exterior effect.

Illustrating different ideals in home building and adapted to different modes of housekeeping, these four plans were carried out in Central New York. The cost of their construction would vary somewhat in other locations and with the substitution of other materials.

Cost of Poured Concrete Houses

By William Mayo Venable



HE cost of building in reinforced concrete varies widely, according to the local prices of materials and of labor, and the design of the structure.

Gravel suitable for the concrete is sometimes excavated on the site of the building and sometimes brought from afar. The writer knows of one four-story warehouse where all of the gravel and sand required were obtained from the excavation for the cellar and cost the contractor nothing but storage and screening, saving in fact, haul to a spoil bank. On the other hand, such materials delivered by rail and long wagon haul to the point where a building is being erected, not seldom cost as much as two dollars per cubic yard. Including the cement, materials for concrete, using a mixture of one of cement, to two of sand, and four of gravel, delivered on the work, cost therefore, from one dollar and a half per cubic yard to five dollars per cubic yard of concrete placed, according to location. Perhaps three dollars and a half to four dollars per cubic yard of concrete, fairly represents the cost of materials under average city conditions.

Mixing and placing the concrete, (exclusive of forms, reinforcing steel, and surface finish) cost varying amounts according to the type of structure built, and the facilities provided for handling the work. On building work, including plant charges, it usually will run between one dollar and two dollars per cubic yard, but may be even more on structures where the facilities for getting concrete into forms are poor. This cost price includes tamping or spading, but not pointing up of surfaces, if the concrete work is done

in such a manner as to require additional treatment after the forms are removed.

The form work is the most expensive item. Owing to the large number of warehouses, factories and other large buildings, it is not difficult to arrive at figures which represent the cost of form work for these structures per unit of surface. The cost of form work on smaller structures, where wooden forms have been used, is more difficult to ascertain, because the quantity of such work has been less, and the accounts of its cost are either not available, or not reliable.

In ordinary warehouse construction, where wooden forms are used, this item costs from seven cents per square foot to twelve cents per square foot of form surface of columns, beams, girders and floors, including the shoring. The number of square feet of form surface per cubic yard of concrete likewise varies with the design and the floor loads which the building is to carry. Flat slab construction has less form surface per unit of concrete than has beam and girder construction, and the forms, being simpler, also cost less per square foot.

Eight to ten cents per square foot may, from general experience, be taken as average prices for wooden forms on various classes of construction. As the form area is greater than the floor space, the total price of form work in a warehouse building will vary from twelve cents to twenty cents per square foot of floor space, according to the design.

If we desire to reduce the square foot price to a price per cubic yard, we must consider the thickness of the various concrete slabs, beams and columns. Slabs three inches thick, walls and beams six

inches thick and columns twelve inches square require four square feet of form per cubic foot of concrete. At ten cents per square foot, this amounts to forty cents per cubic foot, or \$10.80 per cubic yard. This is a reasonable cost for form work on light reinforced concrete sheds and roofs. Slabs eight inches thick, walls sixteen inches thick, and columns thirty-two inches square, require one and a half square feet of form surface per cubic foot of concrete. At eight cents per square foot, this amounts to twelve cents per cubic foot, or \$3.24 per cubic yard, which is about as low a price as is ever reached in heavy reinforced concrete warehouse construction where wooden forms are employed.

The total cost of concrete, per cubic yard, on reinforced concrete buildings such as have been considered, will therefore, be found to vary between the following limits, with the same degree of skill in the management of the work.

Cost per cubic yard:

	Mini- mum.	Maxi- mum.
Cement, sand and gravel..	\$1.50	\$5.00
Labor and plant, mixing and placing	1.00	2.00
Wooden form work.....	3.25	10.80
Total	\$5.75	\$17.80

This is for concrete only, exclusive of reinforcing, or any treatment of floors, or of other surfaces after the forms are removed.

It is obvious that the cost of forms will vary from one-third of the total cost of the concrete on heavy structures where materials are expensive, to three-quarters of the total cost on light structures, where materials happen to be cheap. The form work is the most important item for the contractor to consider in making his estimate on a given piece of construction; and it is second to no other item in importance to the de-

signer who aims to secure for his clients the most economical structure that will fulfill the conditions to be imposed.

This is only to be done by using forms that are very rapidly and cheaply set up and taken down, and which can be used over and over again without becoming distorted or worn out. Steel forms fulfill these conditions, if properly designed and constructed. It has been demonstrated that steel forms can be handled on house building for as little as one and a half cents per square foot of wall surface, and there are instances of even lower costs of handling them. Moreover, it is not necessary to provide as large a surface of steel forms to build a given house as would be required were wooden forms to be used. Hence the equipment required is very much less than builders have been led to suppose from the wide publicity given to the poured concrete house forms proposed by Mr. Edison, who contemplated an investment estimated at \$20,000 for forms for one house. Concrete houses are being erected with outfits of steel forms costing contractors less than \$500 to buy; and although larger equipments are desirable for those who are regularly engaged in the business, the investment never need be disproportionate to the probable use of the equipment; and the cost of labor for form work may be reduced to between one dollar and two dollars and a half per cubic yard of concrete in place, which is low enough to bring the cost of the concrete house into competition with that of the frame house, where materials are reasonable in price, and the contractor knows how to handle his work properly; in fact, with equal attention to business, on the part of the builder, the cost of a concrete house ought to be lower than the cost of a cement block house of the same materials, although the equipment required may cost more.

EDITOR'S NOTE.—We are glad to present our many readers interested in poured concrete construction, this illuminating article respecting the cost, from so excellent an authority.

A Pretty Home in Elyria, Ohio



HIS attractive and home-like home is a good example of the new interest that is everywhere growing, in the appearance and completeness of the average modest home. Not only is the exterior of this

tions, to quote his own words—"outside of some changes in the laundry which involved no expense, no changes in plans were made, and the 'extras', including a bath on the third floor, did not exceed \$150."



HOME OF MR. A. L. PATRICK, ELYRIA, OHIO.

home wonderfully pleasing and agreeable, but the interior has received careful attention in all its details.

The owner desired to bring the cost of his home within an outside figure of \$7,000. The table of cost items appended shows that he came well within this limit. Much of the success of his undertaking Mr. Patrick attributes to the completeness of his plans and specifica-

If all intending homebuilders would give like time and thought to their plans, making sure of what they wanted, before ordering plans, and then securing careful and complete specifications and details, there would be fewer disappointments when they "moved in." Even plenty of money will accomplish little without **thought** and **trouble**!

The exterior construction of this home

is of hollow tile covered with cement, up to the belt course. From the belt course to the gables shingles stained brown are used. The cement has a finish coat of Stonekote, rought cast, of a light buff color.

The interior view gives us a glimpse of the central hall with dining room beyond. The standing wood in hall and living room is oak, stained Early English

were made, which soften the plain casings of the wide openings and afford the means of privacy in the dining room. Thus the effect of space, given to the lower floor by the wide seven-foot openings is preserved, an impression which the actual dimensions of the plan would hardly convey; yet the feeling of warmth and privacy, which is also desirable, is not lost.



LIVING ROOM IN MR. PATRICK'S RESIDENCE.

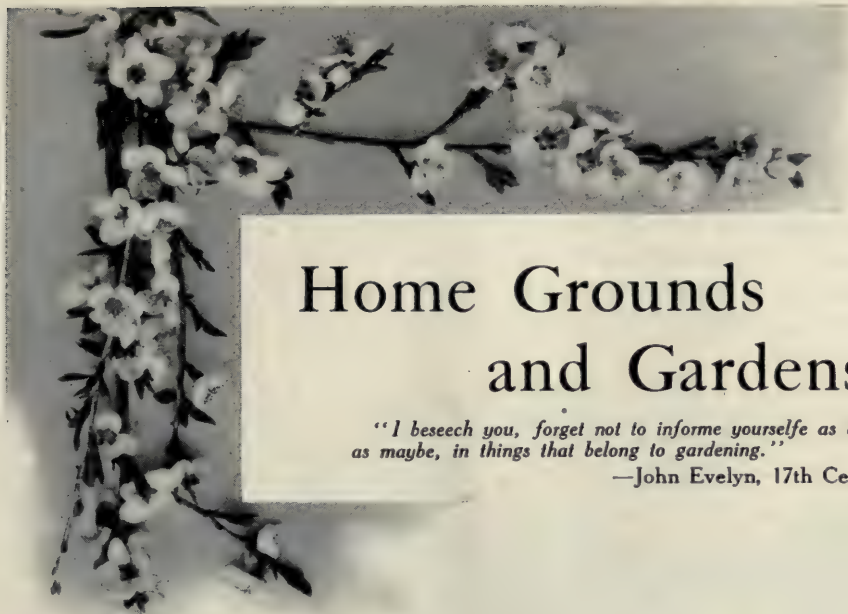
and finished dull. The dining room is birch with a mahogany finish. The living room fireplace is directly opposite the opening into hall and is built of light brown brick with a plain oak slab for mantel shelf. All the floors are of oak finished without stain.

The living room walls are hung with an indefinite patterned paper in tones of brown. The hall has a Tiffany blend in shaded browns. The dining room is treated in terra cotta and dull green.

Portieres of tobacco brown velour have been added since these pictures

Much pains was taken in installing the heating, plumbing and lighting. There are two bathrooms, one on the second and one on the third floor, with full laundry equipment and basement. All the light fixtures are of brushed brass in good design. The principal items of cost are as follows:

Plumbing contract	\$1,100
Carpenter contract	5,000
Grading, electric wiring, light fixtures, shades, portieres, screens, etc., about	600
Total cost, approximately.....	\$6,700



Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

—John Evelyn, 17th Century.

Gardening in February

By Frank Glover Heaton



OW is the winter of our discontent made glorious summer by the gorgeous catalogs of the seedsmen—those brilliantly tinted, seductively worded brochures which so often "but allure to fly . . . like Dead Sea fruits, that tempt the eye, but turn to ashes on the lips." And the amateur gardener's heart is cheered by the half-tone illustrations of great globular beets, crimson-skinned radishes, tomatoes clustered on the vine in scarlet fleshed profusion. In the perusal of descriptions of string beans such as no gardener of the olden times ever was fortunate enough to produce, he forgets the winter winds that whistle under the eaves and snarl around corners; pictured pea-vines borne to the ground beneath their burdens of fat pods bring a rapture to his heart such as is only known to the enthusiast. For your gardener, even if he gardens only beside the February fire-

place, from catalogs, is always an enthusiast, and each recurring catalog season brings on an attack of gardening mania that too often is completely cured before the time for actual operations is at hand.

But to those amateurs who mean actually to carry their winter plans into execution, here is a word of warning. When you are tempted to patronize the seedsmen to the limit of your purse, to order a little of this, a little of that, more of the other, and so on until your list embraces anywhere from a dozen to fifty sorts of garden vegetables, Don't!

In making up your list, another Don't is to be emphasized. Don't experiment with novelties; leave that sort of thing for others. Stick to the old, tried favorites, and you will not be disappointed. New sorts are being originated every season, in all the many varieties of kitchen-garden vegetables; many of them have undeniable merit and are an im-

provement over some sort that they are intended, in time, to supplant; more, however, are simply advertising dodges, and their highly colored pictures—and descriptions—are probably far ahead of the growing reality. For instance, no sugar corn has yet been found that is even equal to, much less the superior of, the old Country Gentleman; no string bean is obtainable that beats the old fashioned Kentucky Wonder, otherwise

your box with good, rich soil; if you can get mold from the woods, so much the better. A portion of the soil should be sand; this makes the mixture friable and keeps it from packing hard and drying out. Enrich, if necessary, with some sort of fertilizer; old, black, thoroughly rotted manure from a cow stable is preferable to any and all others. If, in the sunny window above mentioned, there happens to be a low radiator, fine! Set your



A WELL-ARRANGED BACKYARD GARDEN WITH PATHS LINED WITH BLOSSOMS.

known as Old Homestead; no garden pea grows, be it new or old, that equals in profusion of pods and tender, sweet succulence, the tall, old variety called Telephone. And you may go right on down the list; you will find the same thing true of practically all the vegetables commonly grown in American gardens.

By all means, grow your own tomato plants. If you have a sunny south window in an upstairs room, where you can place a broad, shallow box, you need nothing else in the way of hotbed. Toward the latter part of January fill

earth-filled box thereon, letting sunshine and the heat of the radiator work their will with the soil. Moisten it from time to time, and turn it over occasionally; an old, discarded kitchen fork answers mighty well for this purpose.

Along toward the middle of February—a couple of weeks later, if preferred—plant your tomato seeds. Take a little extra pains in doing so; mark off little furrows in the soil, half an inch deep and three to four inches apart. Then place the seeds, one at a time, in the furrows, laying them as straight as possible, and

at least one inch apart. By doing this, you will find that you have rendered unnecessary a lot of thinning out after the plants are up, that you will have finer, sturdier plants and fewer sickly, spindling yellow weaklings, and your packet of seeds will go about three times as far.

Firm the soil down over the seeds, sprinkle lightly, and go away about your business. The tiny plants will be up within two or three weeks, even under unfavorable conditions; a pane of glass laid over the box, but raised, say, a quarter of an inch above the sides, will hasten germination. Keep the earth sufficiently damp, but never too wet. When the second leaves show on the plants, thin out to stand from two to three inches apart in the rows; when they are an inch and a half to two inches tall, scoop them, plant by plant, out of their original location and transplant; by this I mean simply to move each row over, say, an inch or two. This promotes root growth and makes the young plants much more stocky and hardy than would be the case if each little plant were left in its original location. Keep them growing right along. With the coming of warm spring days set the box—covered with its pane of glass—out of doors, thus gradually hardening the youngsters, and when the weather man says you may set your plants out in the garden you are assured of strong, sturdy, healthy vines, of your own growing, and of a variety that you can vouch for; vastly different from those that neighbor of yours bought at the grocery. Eggplants, peppers, cabbage plants, etc., may all be grown right at home in the same manner, and just as easily. And say what you will about the trouble, or cluttering up the house, a box, or several boxes, of growing plants in the late winter, when all outdoors is shriveling in the February cold snap, is a pleasing sight;

besides which there is the satisfaction of knowing just what you are going to have next summer, when the little plants are big ones and producing, each after its kind. Out of doors there is little that can be done in the way of garden work, at least for the most of us. One little kink, however, I ran across not long ago that to me seems decidedly worth while. Noticing a neighbor digging a long trench along the side of his garden plot, I asked the wherefore. "Getting ready for a tomato bed," I was told. The plan of operations was simple, but as it is altogether new to me, perhaps it may be to others. The plan is this:

Choose a spot where you want a row of tomatoes, cabbages, beans, what not, next season. Dig there a trench about eighteen inches wide, the same in depth, and as long as you want it. Pile the excavated soil alongside the trench and in the trench dump all the household garbage—peelings, scraps, sweepings, wood ashes, dishwater, and the like—to the depth of a foot. If you keep chickens, dump the droppings in with the other stuff. Cover six inches deep with the soil previously removed, and let nature take her course.

This plan affords an easy and handy way of disposing of garbage, and at the same time puts humus and fertility into the soil. Begun in the late fall or winter, several such trenches may be made, filled and covered, and as the sunshine of spring warms the earth the garbage is reduced to its original elements and mingles with the remainder of the soil without any offensive consequences whatever. Set out your tomato plants or whatever you have planned the location for; the roots speedily strike down into the fertile, moist compost, and your plants are assured of a strong, vigorous healthy growth throughout the entire summer.

Popularity of Built-in Furniture

By E. I. Farrington



DINING ROOM IN HOUSE OF MR. ROBERT SEWELL, RYDAL, PA. THE BUILT-IN CHINA CLOSETS ARE INTERESTING. THE TABLE IS LIGHTED FROM THE FOUR CORNERS OF THE ROOM.



ONE of the surest ways of making a house attractive to possible buyers or to those who rent houses is to install a certain amount of built-in furniture. There are two obvious reasons. Built-in furniture adds materially to the charm of a room, while it lessens the amount of money which must be spent for portable furniture. This item is one which makes a special appeal to newly-weds.

When one is building a house to live in there is even greater reason for the use of built-in furniture, for it can be made to give distinction and character to

any room and at comparatively small extra expense. Such features as built-in window seats, book cases and china closets offer splendid opportunities for novel effects, and in few ways can the individuality of the owner be more strikingly expressed.

Builders of apartment houses and bungalows alike find that a decided economy of space may be secured by means of built-in furniture, and without any sacrifice of comfort or appearance. This is especially true as applied to the dining room, where built-in pieces may be used to better advantage than almost any-

where else, for the room may be made rather small and yet not be overcrowded and difficult to move about in.

One of the least attractive pieces of furniture in the average dining room is the china closet, with its obtrusive display, its lack of dignity and its suggestion of ostentation. Built-in china closets, if properly designed, escape these faults. They are an integral part of the room, seem to belong there and do not force their presence upon one. If there happens to be a chimney extending into the room, as in one of the illustrations, the space at each side lends itself admirable to the construction of built-in china closets. The effect in this particular instance is especially happy. They harmonize nicely with the fire place and provide an abundance of room.

Frequently it happens that a built-in china closet occupies a corner of the

room. When a permanent affair of this sort is desired in a house which is already standing, such a location is often the only one possible.

There is a growing tendency, especially in the case of bungalows, to build in the sideboard as well as the china closet. When this practice is followed, the floor space is left practically free except for the table and chairs. Formerly the expedient most commonly adopted by an architect to gain additional space in a naturally small dining room was the construction of a bay window. The plan of building in the furniture instead is now growing in favor.

One of the illustrations shows an excellent example of a dining room in which both the sideboard and the china closet have been built into the wall. The charm of this arrangement makes itself felt at once. Both closet and sideboard fit into



DINING ROOM IN WHICH THE SIDEBOARD AND CHINA CLOSET ARE PART OF THE ARCHITECTURAL SCHEME.



BREAKFAST ROOM IN WELLESLEY, MASS., IN WHICH THE WINDOW SEAT IS MADE AN INTERESTING FEATURE.

the architectural and decorative scheme. There is not a discordant note anywhere, something not often found when portable furniture is used, unless, indeed, it is bought especially for the room and chosen with reference to the trim and decorative features. A pleasant feature is the elimination of much glass, which in the average china closet recalls the oft repeated statement of the "preacher" in the Scriptures that "all is vanity under the sun."

It is a popular plan to use paneling or wainscoting in the dining room, so that it becomes an easy matter to build the furniture into the decorative scheme. Although this practice applies more generally to the sideboard and china closet, a window seat is sometimes made an interesting feature of a dining room in the

same way. One of the illustrations shows an example of this scheme. A window seat of this kind is not only ornamental in the best sense, but is of real value on occasions when the hostess is entertaining and refreshments are being served. Guests are certain to find the built-in seat a delightful retreat. In this case, good judgment has been shown in filling the seat with a well-made cushion which may be taken out doors and cleaned, and the artistic sense of the architect is shown in the wide window ledges offering abundant room for plants, for a window seat of this kind is made doubly attractive if partly filled with potted plants.

As a rule, window seats are more common in the living than in the dining room. Placed in a window getting a good light,

such a seat becomes a favorite spot for those of the family who love books. Often a built-in book case may be constructed in connection with it.

Not infrequently a built-in window seat is made with a box underneath and a seat which may be raised. Such a box is convenient, no doubt, but it is important to have the seat project far enough

is to build chimney seats into the corners around the fireplace.

In most houses the possibilities of building furniture into the bath room have been missed, but an accompanying illustration gives an idea of what may be done in this way. Supplied with two large closets, five drawers and a dressing table, the purposes of a dressing room as



WHAT MAY BE DONE IN THE BATHROOM.

in front so that the feet of one sitting upon it will not be found in uncomfortable contact with the box. In many cases, a single board supported by legs or brackets is to be preferred to the box construction.

Built-in book cases are often found in living rooms and have both a decorative and utilitarian value. Many times a chimney extending into a room seems to invite the construction of book cases on each side. If there is a fireplace, the result usually is especially good. Another popular method of handling such a room

well as a bath room are served, although providing accommodation for bed linen, towels and the like, as well as a generous amount of closet room, comparatively little space in the bath room is occupied, and as the wood work is done in white enamel, there is nothing unsanitary about the arrangement.

Altogether, the opportunities offered by built-in furniture are too alluring to be overlooked by the house builder. They make it possible for him to really have much of his furniture built to order and in the best of taste.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 399 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 400 KEITH & WHITEHOUSE, Spokane, Wash.

B 401 BUNGALOWCRAFT CO., Los Angeles, Cal.

B 405 ARTHUR C. CLAUSEN, Minneapolis, Minn.

Design No.

B 402 LEWIS R. MOSS, Roanoke, Va.

B 403 J. G. DICK, Los Angeles, Cal.

B 404 KEITH'S ARCHITECTURAL SERVICE, Minneapolis

Design B 399.



HE low spreading bungalow is a favorite form of building a home at the present time, but the average bungalow, as it is built in the West, is not constructed properly for a cold, rigorous climate. In the northwest the bungalow form of building is equally popular but to be satisfactory the houses must necessarily be built very warm and substantial.

Our first illustration is that of a bungalow that was recently planned for a northwestern city. It is built with a 12-inch brick wall, using hollow brick on the inside of the wall. The piazza walls are of brick with the copings also of brick. The brick is a hard, purple vitrified brick with a glazed surface and laid with a deep sunk-in joint in good cement mortar. Copings and the steps are built of brick set on edge and also set in cement. This makes durable, permanent work, looks well and is in keeping with the bungalow style.

The piazza across the front is 12 feet in width with the vestibule entrance on the right hand side projected 7 feet and correspondingly on the left side is a small projected room for pantry, in connection with kitchen. The ground size, exclusive of the piazza is 34 feet 6 inches in depth by 45 feet in width, the brick walls are carried up to the underside of the level cornice and the gables are shingled. The roof is also shingled. Full basement under the main house.

The principal floor comprises a large living room with fireplace, dining room, kitchen and three bedrooms, also bathroom, and four ample sized closets, each provided with a window. There is a side hall with entrance and stairs to the second floor and basement. The second floor is not finished although there could be several good rooms finished if required.

It is estimated that this house can be built including heating and plumbing for \$5,000, with the principal floor laid with Washington fir, left natural color, and the casings, doors, etc., finished throughout of fir, stained Mission. The roof shingles are stained and the outside woodwork painted white or may be left rough and stained to suit the taste of the owner. The inside walls are plastered and may be neatly tinted or papered. This is a very well finished, complete bungalow and will make a fine home for either city or country.

Design B400.

A complete, modern city house is shown here with provision for numerous built-on features and conveniences. The foundation, wall, porch and chimney are of cobble stone with cement coping and the porch floor is of cement. Rough cast cement plaster has been used as the exterior finish of the gable ends and dormers with excellent effect.

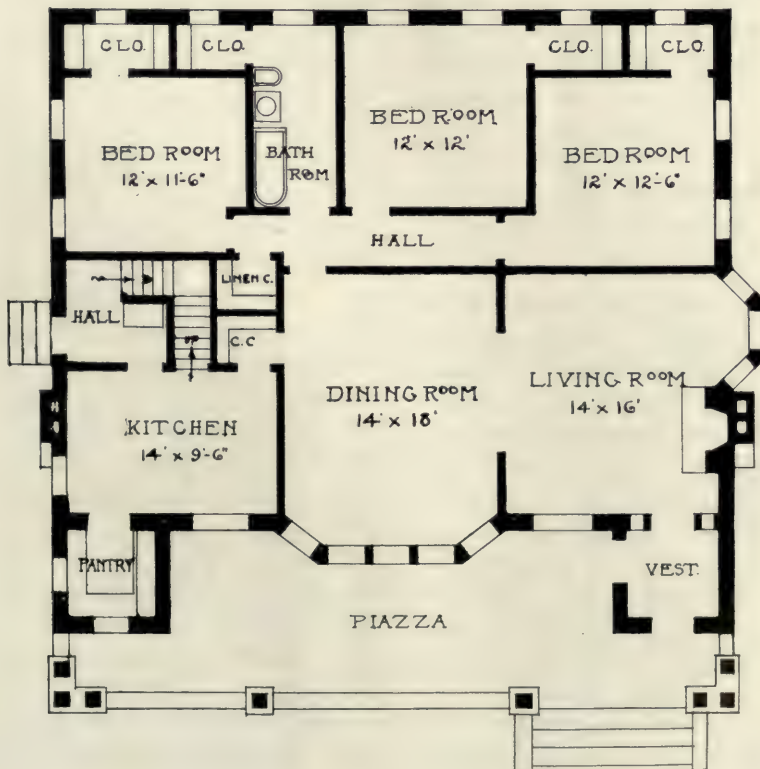
The full basement contains laundry, vegetable, fuel, store and heater rooms. No provision for convenience has been



Chas. S. Sedgwick, Architect.

DESIGN B 399

A Brick Bungalow Costing \$5,000



overlooked in the planning of the first floor, where we find front and back stairways, built-in bookcases, seats, sideboard, clothes chute, coat closet and commodious pantry. The range boiler is concealed in a small closet designed for the purpose.

Ceiling beams are a feature of the hall and living room. These rooms are separated by a columned opening at either side of which are bookcases enclosed by artistic leaded glass doors. The fireplace facings are of brick. It, too, has bookcases at either side. The small high windows are hinged to swing out.

The housewife whose hobby is closet space will find her ideals realized in this plan, as not only is the provision unusually ample, but windows are provided in almost every one. A linen case of generous proportions is also planned.

A sleeping balcony, which has now become almost a universal requirement in houses of this size, is found here. In fact, it would be hard to discover in this design any desirable feature lacking and it is in the fullest sense of the word,—a complete house. Estimated to cost \$5,200 without heating and plumbing.

In building the owner made a slight change in treatment of windows in the dining room, adding the bay window.

Design B401.

From the outside this bungalow appears to be a perfect little gem. The front porch work and exposed chimney are of hard dark red burnt brick pointed with black mortar. The lower part is of perpendicular 12-inch boards, built "battering," with 3-inch battens to the water table and cedar shingles above. The entire exterior is stained as is also the roof.

The front porch is 9 feet wide and through a massive oak door opens directly into a large square living room. The den or library opens off at one side through folding doors and this room has a disappearing bed for use in emergen-

cies. When not in use this bed does not show at all except as a broad seat which should have a leather covered cushion. A closet in the bedroom with raised floor makes room for the bed to slide under. A buttressed opening with drop beam, leads from the living room to the dining room finished with its paneled wainscot, bay window and open fireplace. The floor arrangement of this house invites careful study. The rooms are well proportioned and there are six closets in addition to the ample cupboards in the complete cabinet kitchen. The bathroom with separate toilet opening off the screened porch is a most desirable feature.

This house has also been built with fireplace in the living room instead of in the den, omitting the dining room fireplace, thus giving a single buffet instead of two china closets and a double-acting door between the dining room and kitchen. The inside walls are tinted throughout except in the bathroom and kitchen, where, below the chair rail, they are enameled so that they may be washed.

This house is 28 ft. front by 56 ft. deep (exclusive of front porch) and should be built inside of \$2,500. The interior trim is of Oregon pine stained and finished in dull egg-shell gloss. If built for a California home, it could probably be completed for about \$2,200.

Design B402.

Another excellent \$6,000 hollow tile house, taken from the brick builder competition, is contributed to Keith's this issue. The exterior walls are of Natco hollow tile with rough cast cement plaster stained and with stained shingles on the roof.

Note the large floor plan incorporating many of the attractive features of a \$10,000 home, but simplicity and careful study of the exterior details lays down the cost.

The rooms are all well arranged. There

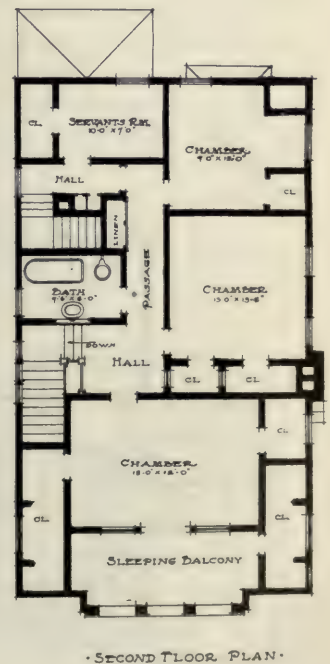
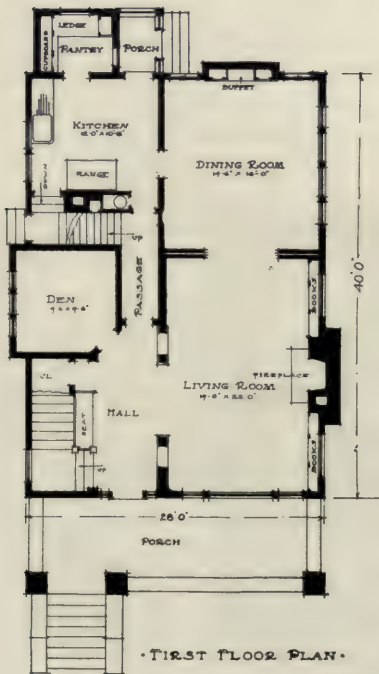
(Continued on page 106)



DESIGN B 400

Keith & Whitehouse, Architects.

A Very Artistic Modern Home





Bungalowcraft Co., Architects.

DESIGN B 401

An Interesting Western Bungalow

is a den on the first floor, good pantry and entry accommodations, extra toilet, fireplace in living, dining room and two chambers on the second floor.

There are hardwood floors throughout, with hardwood for first floor finish and pine for paint on the second floor, tile floor in bath, vestibule and on the porches.

There is full basement with concrete foundation, laundry, fuel and vegetable room and hot water heat.

A few hundred dollars spent for concrete floors and tile or slate roof would

make this home fireproof, thus reducing the insurance rates and thereby helping to make the investment more profitable.

Design B403.

It is none too early to consider plans for the summer lakeside home and here is an attractive inexpensive cottage, truly "Ideal for the Lake." It has a concrete foundation with shakes on the walls and shingled roof. There is a good sized living room which is used as a dining room as well as a bedroom as it contains closet for a wall bed. The kitchen is complete





Courtesy of the Nat'l Fireproofing Co.

Lewis R. Moss, Architect.

DESIGN B 402

Modern Design for Hollow Tile Construction

with cupboards, sink and chimney. The bath could be used as child's bedroom if desired. The floors and finish is pine throughout with imitation tile on kitchen and bathroom walls.

Estimated to cost without, of course, heating or plumbing, \$650.00.

Prepared roofing in place of shingles on the roof would reduce the cost.

Design B404.

A combination of siding and shingles on the outside walls stained, make a very pleasing exterior.

The front porch piers and balustrade are of brick with dark paving brick stood on end for base and coping, the floor being of cement.

There is an open fireplace in living

room, columned opening between living room and hall, bedroom, living room and dining room.

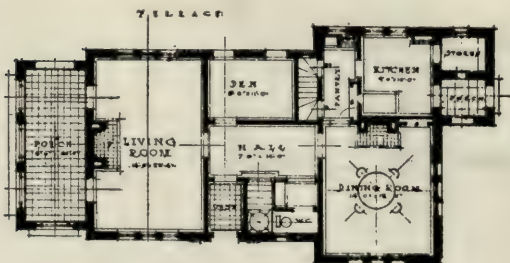
The first floor has one large well lighted bedroom and a bath, which has tiled floor, also tile in front vestibule.

The plans call for two good chambers on the second floor with plenty of storage room and another bathroom; there is no tub provided for the bath, however.

The floors and finish of the main rooms on the first floor is birch, balance finished in pine to paint, with yellow pine floors throughout second floor.

There is full basement with concrete foundation, hot water heat, laundry, fuel and vegetable rooms, etc.

(Continued on page 109)

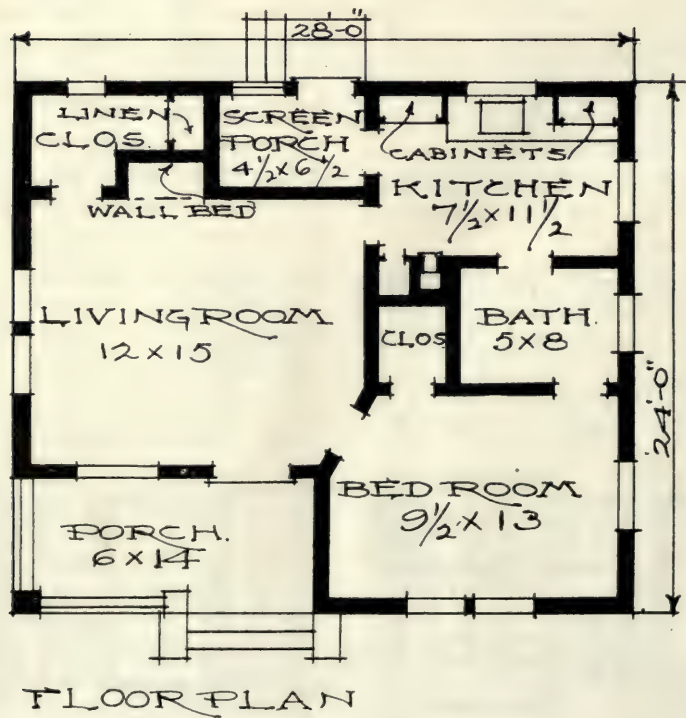




J. G. Dick, Architect.

DESIGN B 403

An Ideal Inexpensive Lake Cottage





DESIGN B 404

Semi-Bungalow Home

First floor, 9 feet; second floor, 8 feet; the chambers being full height. Size, exclusive of porch, 36x30.

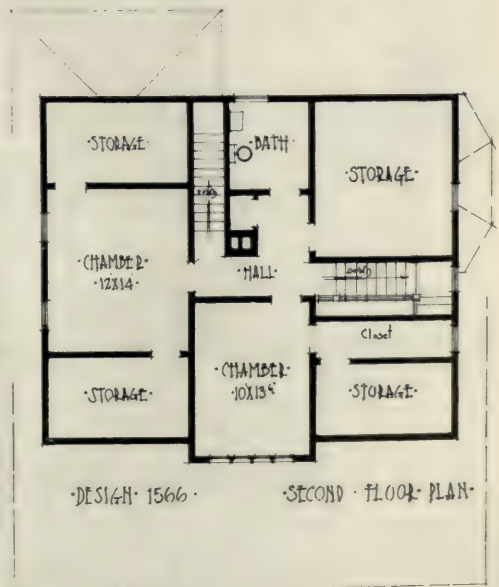
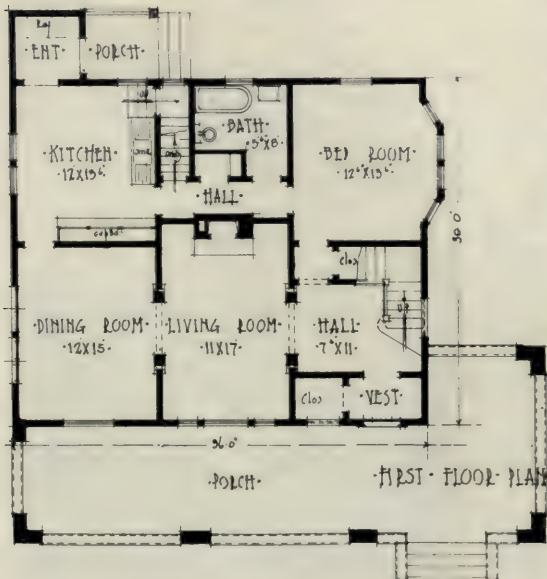
Estimated to cost \$4,000 complete, including heating and plumbing.

Design B405.

The large Ionic columns in front ex-

tending from the floor of the portico to the soffit of the main cornice which extends out from the roof of the portico, are the predominating features of this colonial brick house.

There is an open terrace on each side of this portico; the main living porch be-





Arthur C. Clausen, Architect.

DESIGN B 405

Brick Colonial City Residence

ing on the side reached from the living room by French doors.

On entering the reception hall to the right is a library with open colonial fireplace, with built-in bookcase on each side and built-in seat. The large living room, 17x28, has an open fireplace and built-in seat with a sun room in the rear. The kitchen and pantry accommodations are complete; the dining room has a built-in sideboard.

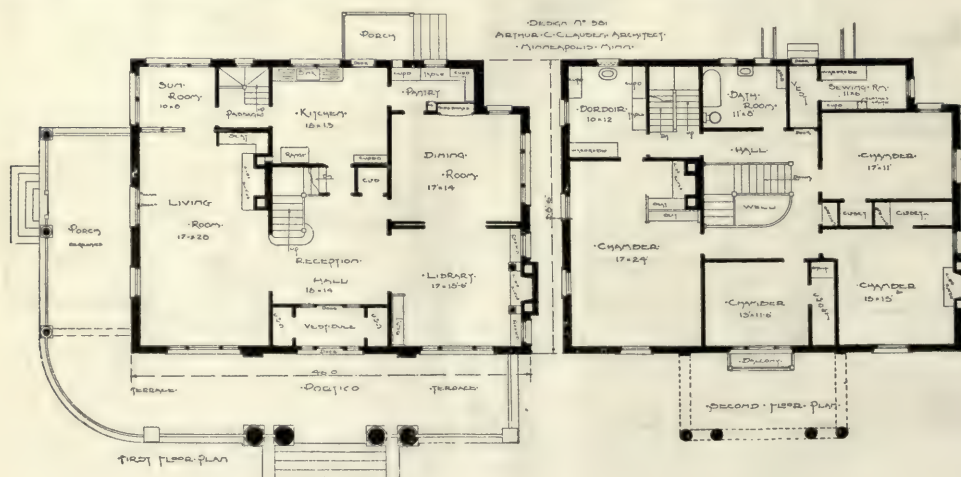
On the second floor beside the three smaller chambers, sewing room and bath

is the large owner's chamber, 17x24, which has a built-in seat and open fireplace.

In the attic is finished a good billiard room and two chambers and another bath for servants. The house is finished in oak throughout with oak floors.

There is full basement, with concrete foundation, laundry, fruit and vegetable room, hot water heat.

It is estimated that this house could be built complete, including heating and plumbing, for \$12,000.





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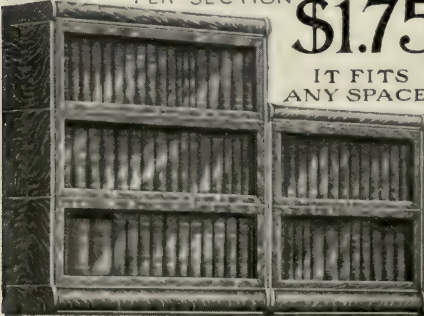
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The House as a Means of Expression.

LOOKING back over the history of domestic architecture we find that each special sort of building was the expression, more or less complete, of the national character. The subtlety of Egyptian or of Hindu has stamped itself upon temples and palaces alike. Who but the most polite nation in the world could have originated the Japanese houses whose privacy is only secured by the consent of one's neighbors? Greek, Roman, Gothic, Queen Anne, each expressed the national peculiarities. In a lesser and more individual degree each dwelling ought to express the personality of those who live in it. As a matter of fact few houses do, but that makes no difference with the ideal. Without this individual note the most beautifully designed and complete house falls short, and approximates to the cold impersonality of a hotel.

The writer has recently stayed in a house, the home of an elderly couple, whose children have married and gone out into various parts of the world, which it seems to her is a good illustration of her point.

The house itself is in no way remarkable, except for its size and a quaint effect of overhanging and bracketed eaves, redeeming the uncompromising New England gables, and its plan is of the simplest, a broad hall with a long drawing room on one side, library and study on the other, with a dining room running across the house at the end of the hall, with a bay window at its end. The ceilings are at least fourteen feet high and the woodwork absolutely plain, except for a beveled edge, the doors being made with a single panel. Except in the hall and dining room there are no

hardwood floors. The mantel pieces on the lower floor are of the black marble so highly prized seventy-five years ago, on the upper floor of wood, but all are high, with generous fireplaces below them.

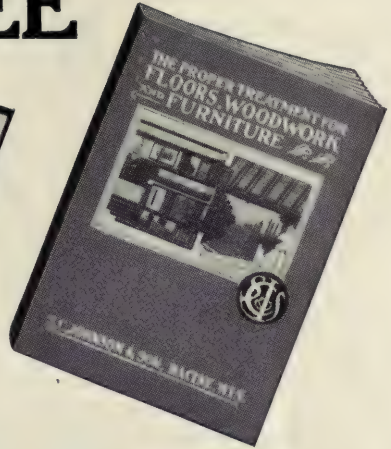
Much of the furniture is old mahogany not heirlooms but bought intelligently in the seventies when it was still possible to pick up good pieces for a trifle at country auctions. Many of the pieces have a history of one sort or another, every one of them is good of its kind. The master of the house has had a hobby for collecting prints, his wife has a pretty taste in china. Old furniture, prints and china compose into a delightful whole.

The Broad Hall.

In the wide hall with its dignified staircase going straight up to a wide landing, the rugs are reddish brown Bokkaras. The woodwork has been painted a reddish brown-like mahogany and the walls are covered with burlap which has been washed over with a terra cotta tone. There is a stair carpet of Wilton velvet, an almost exact copy of the rugs. There are two or three fiddle back chairs, with tapestry seats in low tones, a long mahogany sofa covered to match and a couple of tables, bearing respectively a jar and a bowl in old Japanese china in dull reds and blues. On the side wall, just opposite the foot of the staircase hangs a large mirror reflecting one's silhouette very satisfactorily as one ascends or descends. Contrary to the usual custom the space beneath the stairs is not inclosed in any way and makes a retired place for the telephone table and a little rack of directories and guide books. The few pictures are family portraits, interesting rather than meritorious.

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The Center of the House.

The center of the house is the library, at the right as you enter. Here the woodwork is the warm brown of old French walnut and the walls are covered with Japanese grass cloth in a golden tan. But you do not think very much about the walls because they are almost entirely covered with prints, many of them of great rarity and value. The exception is over the mantel piece where the place of honor is filled by the keen, fine face of the master of the house, the work of a distinguished artist. There are some high bookcases, between the windows a mahogany cabinet with ormolu incrustations, a great treasure, a very workman-like writing table in the center of the room handsomely furnished in bronze, a long and luxurious sofa upholstered in a decorative bowered cretonne and a single arm chair in old red brocade. Other stuffed chairs have coverings of warm brown corduroy and the curtains at the long windows, of which there are three, are of figured damask in the same tone.

In the corner of the room, between two windows, a south and a west one, is the place of the mistress. Here is her little Davenport desk, her low seated, high backed sewing chair, her sewing table with its pendent silk bag, holding a tall lamp, a little folding stool for her work, and the tilt top table on which she plays cards. Her high backed chair of a French pattern is covered with the same cretonne as the sofa. Besides two or three pairs of brass candlesticks there is little bric-a-brac in the room except a few pieces of Doulton in brown tones.

The Portrait Room.

Just back of the library, opening into it by a door which, always stretched wide, is a good background for a huge fern on a stand, is the portrait room, so called from the fact that its walls are almost covered with a collection of engraved portraits. One wall is given to lawyers, another to artists, a third to writers. The walls are covered with a rough paper in oatmeal color. An interesting feature is the ceiling marked off into a geometrical pattern with narrow strips of wood painted white. This is effective in lowering the apparent height

of a rather small and very lofty room. In this room the various tables and cabinets hold a number of pieces of Delft and old blue Canton. The floor is matted and the furniture is old rosewood. The only upholstered piece is a couch covered with a time-worn crimson damask. The same damask covers a cushion in a black wicker chair and the crimson and a dull blue are repeated in the rug.

Grey Blue and Old Mahogany.

In the long drawing room, across the hall, the walls are papered in a bluish grey paper of a conventional design, the woodwork is white, and the fully carpeted floor is in bluish grey darker than the walls. Here are gathered some very choice pieces, a gate legged table, a swan necked sofa, some beautiful chairs and tea poys in black and gold lacquer, a low bureau with fine brasses useful for holding prints, an Empire ottoman and some unusually good Chippendale chairs. As a concession to modern tastes are a grand piano and a couch and chairs luxuriously upholstered in dark olive velour.

The pictures in these two rooms, which are practically one, the separating folding doors having been removed, are divided, oils hanging in the front room, water colors in the back. In the latter are also a few mezzotints and some copper plates printed in red and purple tones. Aside from the pictures the only really positive color in either room is a clear brilliant yellow used in a pillow cover, in the lampshades and in a piece of brocade thrown across the end of the piano.

From Drawing Room to Diningroom.

From the drawing room you pass to the dining room through the china closet. Originally this was the ordinary affair with closed in cupboards and a butler's sink. The latter has been removed entirely and the cupboards replaced by glass fronted closets running entirely around the room, in which the household treasures are ranged. The backs and shelves of these closets are painted a soft olive. The single window has been filled in with an irregular arrangement of the bottoms of bottles, fitted together and leaded. The greenish light is charm-



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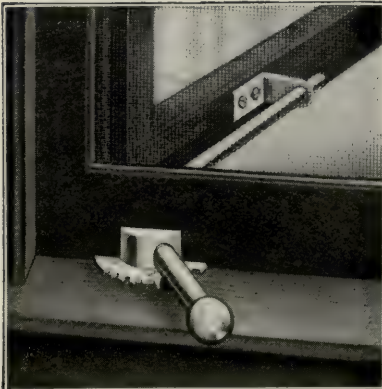
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ing when the sun shines through the window.

The Yellow and Ivory Dining Room.

The dining room furniture is mahogany, not remarkable in anyway, except that the long, low sideboard has a top of white and black Italian marble and is left uncovered by linen or lace. There is considerable good colonial china on walls and shelves, and the service in daily use is old blue Canton. With a view to giving an effective background, the walls were covered with an English paper in two tones of bright yellow, toned down by ivory white woodwork. Much of the china is arranged on an over-mantel of shelves backed by looking glass. The yellow of the wall is supplemented by a length of Chinese brocade in blue and yellow, and the rug is a Kashmir in yellow and blue.

The Problem of Many Bedrooms.

How to differentiate eight good sized bedrooms, giving each a character of its own, yet not repeating any color scheme is something of a problem. Two of the eight are men's rooms, with Mission furniture, neutral tinted walls and a comfortable absence of draperies. One is very gay with cushions of twilled Turkey red and odd bits of red lacquer. The other has a spread and some chair cushions of a brilliant Java print.

One bedroom has a fourposted bedstead with hangings of white dimity repeated at the windows and dressing table, with a wall paper of great bunches of pale tinted roses tied with green ribbons. Another old fashioned room has a striped paper in pale grey, with a nose-gay-and-blue ribbon border outlining each of the four walls inside a two-inch band of plain grey and white madras hangings.

In the other bedrooms the furniture is modern and a good deal of very decorative cretonne is used with plain cartridge papers on the walls, each repeating one of the colors used in the cretonne.

Mention should be made of the long and wide upper hall from which all the bedrooms open, with its matted floor, the highboy and chests of drawers, including a camphor chest, ranged along

its walls, its western window filled with plants and its terra cotta walls hung with prints of Raphael's cartoons.

Not everyone's taste runs to the accumulation of mahogany and blue china, but everyone has some special liking or taste which can find expression in his dwelling. Only as it does is one's house interesting or distinguished.

Using a Gas Range in Winter.

As the cold weather comes on with the end of October, one parts with regret from the gas range that has made the work of the warm months so much easier. A coal fire seems to be essential to heat the kitchen comfortably. While it is, in extremely cold weather, and in a large kitchen, the gas range can be relied upon to keep the room comfortable in moderate weather, if one of the oven burners is kept lighted and turned down to the lowest point possible. With the door of the lower oven left open considerable heat is thrown out. The upper oven can, of course, be used for things that require slow cooking, cereals, baked beans, stewed fruit and the like. While the amount of gas burned is somewhat increased, it is not excessive, and may be largely balanced by utilizing the upper oven.

Of course, the hot water question remains, unless one has a special heater for that purpose. The attachment of a hot water boiler to the furnace is not so general as it might be, but when it can be managed simplifies matters a good deal.

One point about the kitchen coal fire does not seem to be very generally understood. Most good managers are agreed as to the advantage of keeping the fire in over night, but very many people find difficulty in doing so. In most cases the key to the difficulty is in the size of coal used. Modern ranges have rotary grates, in three sections. If large coal is used, clinkers and an occasional piece of slate get wedged in the grate in such a way that it is almost impossible to move it and therefore to rake the fire effectually, and the permanence of a fire depends almost entirely on its being kept free from ashes at the bottom. This same clogging affects the proper heating of the pipes of the water back.

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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert. Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Color Scheme for Bungalow.

T. G. "Enclosed please find floor plan of a Craftsman Bungalow. Will you kindly send me a color scheme. My living room faces southwest and also northwest. My dining room northwest. I have a complete dining room set of dark mission oak, but will have the rug and curtains to buy. In this room would you advise me to use as outer curtains a Japanese design of white buds or a blue (sort of delft blue) ground. The walls I wish to tint or paint and these walls in the dining room are to be divided by flat strips of wood to have a panelled effect. What color rug would you advise.

"My living room, as you see, is separated only by a wide doorless space, but I do not wish to carry out the dark oak here also as I think it is dismal. I thought perhaps a few fumed oak pieces would look well and a few chintz covered chairs and couch. Should the reception hall, main hall and home room all have same colored wood work. The contract calls for burlap all around vestibule, reception hall and hall up about three feet and be panelled with strips. I only have a few skins (wolf skins, full heads mounted and coyote skins). I thought of using these for a time in the living room. I have seen some very handsome woven curtains, English make, which I can obtain from an English family. They are of wool, dark blue ground, with rather stiff bunches of yellow daisies woven in. These I thought I might use in the wide doorways for portieres. I am told much of the wood work and many floors are now being finished natural color."

Ans.: As the dining room is lighted only by a window on the N. W., you cannot use a blue and white scheme of decoration. There is, however, a Japanese crepe in a rich blue with yellow flowers

that could be used for the windows in conjunction with this same rich blue between the wood strips of wainscot and an upper wall of dull tawny yellow with deep cream ceiling. With blue and yellow in the rug you could then use the portieres you speak of in the arch. If this scheme be adapted for dining room we would tint the living room wall pale ecru, upholster the couch and chairs in a coarse Craftsman like material, \$1.00 per yd., 50 in. wide, in a rich moss green and make pillows for the couch of a decorative blue and green cretonne, using the same cretonne for the windows over inner curtains of ecru scrim.

The portieres in arch into hall should be of the plain green. The rug should be either plain green or blue and green mixed; the wolf skin would be more appropriate in the hall or den.

We do not think the natural finish woodwork would harmonize with such a bungalow style of treatment, but it is not necessary to use a heavy stain. Fumed brown is not dark, or a Bog Oak stain could be used. The floors need not be stained if you prefer not. The woodwork in living room and halls should be the same. We approve of the burlap wainscot in hall as it is a great protection and is well suited to such a bungalow. We should choose a warm green burlap and tint the wall above the same pale ecru of the living room. We think this will give you a restful and refined interior though possibly not as out of the ordinary as you desire.

In Grey and Blue.

M. E. C. "I am building a bungalow and have been interested in reading your helps in finishing and furnishing. Mine is a little different from any other and I should be very glad to have suggestions



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ANSWERS TO QUESTIONS—Continued

about some things that I am undecided about. I have only four rooms and a bath. My furniture is mahogany, black walnut and cherry—all old keepsakes mostly. I am going to take off some of the unnecessary ornaments from the walnut, but am not sure that I am brave enough to try to remove the varnish and refinish them.

"My living room is 12 by 15 with built-in bookcases between it and the dining room. It faces east and south. I have plenty of light and my furniture is cherry and mahogany. There is a long window seat on the south side and a corner fireplace. I do not know how or what color to finish the floor around the rug.

"My dining room is 9x12. My furniture is walnut for this room, and I have some walnut lumber that I want to panel the room up to the plate rail and stencil the panels. I would like dull blue for the color. Would both rooms look well tinted in silver or greenish gray for the walls and how should the doors be finished to look well with the walnut. What color brick would be best for the fireplace?

"I also have old steel engravings and some very good but old-fashioned oil paintings—quite a bit of old china, too. My old blue tea set is why I wanted the dining room in blue. Should I keep the paintings in one room? I have six or eight quite large pictures. What color would be best in the living room?"

Ans.: Your own ideas of grey and blue for your wall tones, seem very good to us, only the grey should be a putty, instead of a silver grey. Such a background will be the best harmonizer for the mixed furniture and the oriental rug. We would use a rug in plain old blue in the dining room and your idea of a stencil decoration in the old blue is very good. The walnut wainscot will add much to the room and should receive enough stain to bring it to the color of the furniture. The doors should match as nearly as possible; you will have to experiment by thinning the walnut stain. We should use the same stain on the floors and grey brick for the fireplace.

There are few pictures that are appropriate to a dining room and your old blue china is a far prettier decoration there.

As the living room is small, we hardly see how you can hang your pictures. We would select the best, grouping engravings together upon one wall and the paintings in the other spaces. Or it might be that one of the engravings would be best over the mantel piece.

If the walnut furniture is in good condition it is not at all necessary to refinish it though we approve your plan of removing the superfluous ornamentation.

Decorating and Furnishing a Living Room.

H. K. "Having been a subscriber for your magazine for several years, am sending you a small sketch of our house and hope you will help me in decorating and furnishing the living room.

"The house is a small, simple cottage in the country, but I wish to have it in good taste.

"My idea is to have wood trim in living room, ivory enamel and the walls and rugs in dull blues and greens.

"The west end of this room must be used for dining room and do not know what kind of rugs to use. Have two oriental rugs in blues and greens and some red. One four feet three inches by seven feet six inches and the other 3 feet six inches by six feet. Piano in mahogany, but have library table and three chairs, of good design, of golden oak.

"I wish to have these refinished and get dining table, chairs and buffet that will look well in same room with mahogany piano. Would also like to get an overstuffed davenport to set at right angles with the fireplace.

"What kind of inexpensive mantel would you suggest for this room and how shall I have oak floor treated?

"Am sending fifty cents for samples of wall covering and suggestions."

Ans.: We are returning to you your floor plan with lines in blue pencil indicating position and sizes of rugs, also our suggestion for placing principal pieces of furniture. We are also suggesting moving the front porch as indicated, which would add greatly to the appearance of the exterior and be equally convenient. This may not be as practical however, as it seems.

We are glad the woodwork of living

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room is to be old ivory, which with the blue, green and rose, will be ideal. We are sending you a choice of three suggestions for the wall of living room, our own preference being for the chintz design on light grey ground. If this or the plain grey paper be used, however, it would be imperative to balance it with plain blue in some of the hangings and furniture covering. As for instance, the davenport of fumed oak should have a covering of plain blue velvet or corduroy and side hangings of the same, or blue casement cloth, at the windows. With such treatment of furniture and the blue rugs the plain grey paper would be very good. If the blue, green and rose paper is chosen, then the davenport would be charming done in the blue and rose and grey cretonne. We would suggest getting this davenport in brown wicker, rather than the fumed oak and a brown wicker chair, upholstering both the same. Such a davenport five feet eight inches long 2 feet six inches wide, would cost either in the blue velvet or the English cretonne, about \$45.00. A davenport in fumed oak could perhaps be furnished for \$50.00. In either case we would place it in front of the fireplace, to back up against the library table. The golden oak pieces to be refinished in fumed oak. The old varnish must be removed and then restained and a dull finish.

The mantel frame should be painted ivory like other woodwork and a facing of grey brick or tile. The floors stained a fumed brown. The ceiling should be tinted the light grey of the paper. If one of the blue papers is preferred in living room, the chintz design would be charming on the guest room opening from it.

The small sample of blue mottled Rego Wilton carpet attached is the best thing we know for an inexpensive but good rug. A rug could be made of the blue like this, in a size six feet ten inches, plain, with band ends, for \$20.50. It would be suitable for the dining room and harmonize with the blue and green orientals and have a refined and handsome appearance, also has splendid wearing qualities.

Tints of Walls.

A. J. S. "I have been a constant reader of your magazine since Jan. 1st, 1912.

Have gotten many good ideas, but would like you to send me suggestions regarding the tinting of my walls. The walls will be plastered—the rough finish. Living and dining room to have beamed ceilings. Living room to be furnished in fumed oak. Dining room in Early English. Oak floors in both rooms. We have a dark tan rug for living room, and a green for the dining room."

Ans.: Inasmuch as the furniture and rugs are already determined, the wall tints must be chosen to correspond. As the rugs are either green or tan, we are limited to those tones of color and as it is very difficult to secure pleasing results from calcimine in green shades, we are almost compelled to the tan and ecru tones.

The parlor bedroom for instance, would be very attractive with walls tinted a soft old blue, which would set off to the best advantage the Circassian walnut furniture, but if green and tan rug must be used, this cannot be done.

For the living room we would advise light tan, with light tan mixed with white, two parts white to one part tan, for ceiling.

We think the dining room would be much handsomer if a moss green burlap were used between the wood strips of wainscot, with pale green tint for upper wall and cream mixed with white to produce an ivory tone, for ceiling.

The pine woodwork in breakfast room and kitchen could be finished natural or painted white. In bathroom it must be white. The walls of breakfast room and kitchen could be tinted a very pale green; bathroom, cream.

For the guest room we would have ivory white woodwork, deep cream walls with a frieze or border of pink roses, deep pink rug and cream enameled or maple furniture, with rose cretonne furnishings. The other room could have a pale ecru wall and use your green and tan rug here. Your color scheme for exterior is very good.

New House and New Furniture.

F. W. L. "We are subscribers to your magazine and take a great interest in your answers to questions, so I will ask you for a few suggestions for my new

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home. I have a large lot in a small town and a large two-story house facing east.

"Solid mahogany furniture throughout and hardwood floors. I do not care to use paper or burlap on walls. Will you please suggest a way to finish walls and woodwork? Also what to do with dining room, as I do not care to use plate rail. I will have plenty of light in all rooms. Most of the homes in our town have deep cream walls and white woodwork with mahogany furniture. If you can suggest a change I will be glad. Someone has suggested a light green for walls. If you think this pretty please send a shade of green or suggest something else. My hall is to be a broad middle hall. What style staircase would you suggest? Also suggest style of light fixtures and whether or not a cornice will be pretty with the walls you suggest."

Ans.: We can suggest nothing better for style of staircase in center hall, than many shown in our book of Interiors Beautiful, which you have. We refer you specially to the upper cut on page 38, which gives you generous space in the front of hall and an effective hall seat. The hall shown on page 59, Sept. KEITH'S, is also a good one.

In regard to treatment of woodwork and walls, we think dining room woodwork should be ivory enamel. The hall and living room might be stained silvery grey since you are tired of white and mahogany. Mahogany furniture is harmonious with this woodwork if walls and furniture are treated correctly. We should not advise a green tint on walls, but a soft grey on both hall and living room, with a frieze decoration either stencil or paper in harmony with the colors used in rugs, draperies, etc.

A cornice either of wood or plaster could be used if preferred to the frieze, but this should be the color of the woodwork. If the dining room faces south, we would use a very pale green tint on wall with decorative frieze of green foliage and rug of lichen green. For the silvery grey stain, we advise Handicraft Silver Grey and this stain is most effective used on ash wood. For wall tints, either Mellotone, Alabastine or Flat-tone in the ready prepared tints.

Decorating a Bungalow.

L. M. H. "We are to have a new bungalow. Will you please advise me as to color of woodwork and paper. Columned opening between living room and dining room. Living room will have two small windows on south side and one large one on east side. Dining room lighted on the north and east, overshadowed by a porch on both sides. My idea was to have these two rooms finished and papered alike. The woodwork to be dark brown oak finish with tan oatmeal paper for the walls and cream ceiling.

One bedroom is lighted on the south and west. For this room we must use light oak furniture.

The other bedroom is lighted on the west only. Mahogany furniture for this room. Both bedrooms are overshadowed on the west by a porch. How should I finish these rooms to go well with the furniture?

Ans. It will be well to paper the living and dining rooms alike, but we would not choose an oatmeal paper. Use instead a golden brown imitation grass cloth or burlap or a Favril Blend in shaded browns with hint of green. The paper imitations of these textile weaves are really admirable and not expensive. Also we would advise a five-foot wainscot of wood in the dining room, using the wall paper above that only. The ceiling should be pale tan. The stain for woodwork not much darker than the furniture.

As to your bedroom problem, if it were ours we would paint the woodwork a dull but medium shade of sage green and paper wall with a narrow indefinite stripe in the same soft greens a shade lighter and a pale tan ceiling. Then find a cretonne or an art ticking with a pale tan ground and flowers of old rose, with soft green foliage and use for a valance across the tops of the windows and side hangings, also for chair cushions a dress box, etc. We have seen such a cotton with bunches of hydrangea in that peculiar soft rose. Your yellow oak furniture in this setting will be a pleasing thing.

The other bedroom is easy, as white woodwork and a pale blue wall with pink rose border, is what you want.

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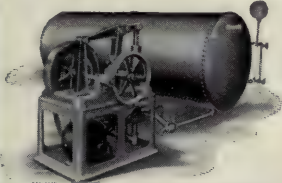
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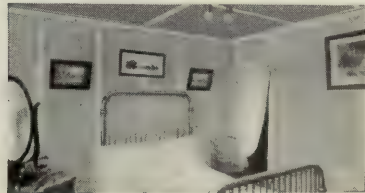
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*Bed Room in the Home of Mr. Cox, whose
Letter is Quoted Above.*



The Tendency to Rigidity.



HABIT is one of the laws of nature, and the conduct of life is very largely regulated by the assumption that any action tends to repeat itself indefinitely and become a habit. In the main this is advantageous, as limiting the effort required to achieve a definite end. It is possible to conceive that there was a stage of human development in which the bodily functions were not automatic and were governed by the will, whereas now the possibility of any interference with one of them by an act of the will indicates a condition of disease.

The domestic province is very largely under control of the law of repetition. We speak of the well regulated household as moving on wheels, and can anything be more monotonous than the endless repetition of the whirl of the wheel as it passes over the road, or along the railroad track?

Is this monotony of repetition altogether desirable? Shall we always eat roast beef on Sunday and corned beef on Wednesday, or might they not change places occasionally to the pleasure and benefit of the family? There is a girls' school in New England in which a weekly bill of fare is in use which was drawn up at the founding of the institution more than fifty years ago, and it is repeated in every detail for every one of the forty weeks of the school year. It is not unusual for pupils to be sent home for a change of diet. On the other hand, one of the best boarding houses in an east-

ern city has built up its reputation on the excellence of its table, and the mistress prides herself on the fact that no inmate of the house ever knows what he is going to eat until he is served, unless some particular dish has been cooked at his request.

It is a deplorable fact that it is the best housekeeper who is most the victim of habit. As she brings the practice of her profession to perfection it assumes an importance out of all proportion to the other interests of the family and she becomes intolerant of any exceptions. Woe betide the unfortunate child whom a nervous temperament has afflicted with difficulty in getting up early, or the adult whose business hours are out of the ordinary. I fancy if we could investigate the conditions surrounding some of the members of respectable families who have not "turned out well," we should find that they came from homes where housekeeping was a counsel of perfection and the domestic processes were an end and not a means.

But which is the finer, the absolutely rigid granite column, beautifully proportioned and carved though it may be, or the rendering of the human form in bronze or marble, so instinct with life that one looks to see it carry on the interrupted motion whose pose the sculptor has caught? And is not the best sort of housekeeping that which, while achieving all the essentials of comfort and health yet is so plastic as to meet the needs of every member of the household with the most exquisite adaptation?

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The Ethics of the Breakfast Tray.

In those remote days when family prayers were a custom in almost all families identified with any part of the church, breakfast was a simple matter. You woke at an early hour, dressed with despatch and descended to eat the substantial meal which you were taught was the only suitable foundation for the day's activities. Meat, warm bread and potatoes were concomitant parts and never shirked by well regulated families. In the late sixties and the early seventies the gospel of porridge was extensively preached and its addition to the bill of fare was the opening wedge. If you were anxious to do things properly, you eat the porridge first alleviating your natural distaste with plenty of sugar. If you were less concerned with the elegance of service the porridge served as sort of dessert. To this day you find many country tables where the cereal is merely the winding up of a very hearty breakfast. But when it was served at the beginning of the meal, it had a way of taking away the appetite for the more solid food, and the first step toward the light breakfast was taken.


From the first step there has been a continual evolution whose culmination is the no breakfast theory. But whatever the particular development, the fact remains that an increasing number of people are in rebellion against the traditional American breakfast. There is even the breakfast temper, extremely short and uncertain, with a disposition to take refuge from general conversation behind the newspaper.

Here is the advantage of an elastic household regime. Instead of patiently enduring a sulky countenance morning after morning, why not serve the breakfast of the trifling eater or of the heavy sleeper, or of the victim of the breakfast temper in his bed, or at least in his room, after the sensible French fashion.

In the case of people who must sleep late in the morning breakfast in bed is almost a necessity, if the household routine is not to be thrown out of joint entirely. The newspaper man, the victim of insomnia, the person who has to be up with a child or an invalid, all these need the morning hours for sleep and are gotten up to share in the family breakfast only at great inconvenience and detriment to themselves. In the case of insomnia, a leisurely meal in bed often makes an additional hour's sleep possible.

Irregularities at mealtimes are trying enough to the mistress, but they are absolutely demoralizing to the maid. When you hear of a household which is in endless hot water with servants, without apparent cause, you may be almost certain that it is a fundamentally irregular household, that the servants are delayed in beginning their work in the morning and hindered from finishing it at a reasonable time at night. It is impossible in the very nature of things that household work should be as exactly regulated in time as factory work, and this fact offers some compensations to the domestic worker, but an average of working time should be maintained, even at the sacrifice of some cherished traditions.

No sane person would advise extending the individualism which is practical and necessary in the case of an adult to the younger members of the family. Presence and punctuality at meals are a valuable part of the training of children, and the well ordered table is a capital school of manners. The important thing is to be able to recognize the necessity or desirability of an exception and to make it cheerfully and effectually. The ability to do so is a fair test of the quality of one's domestic management.




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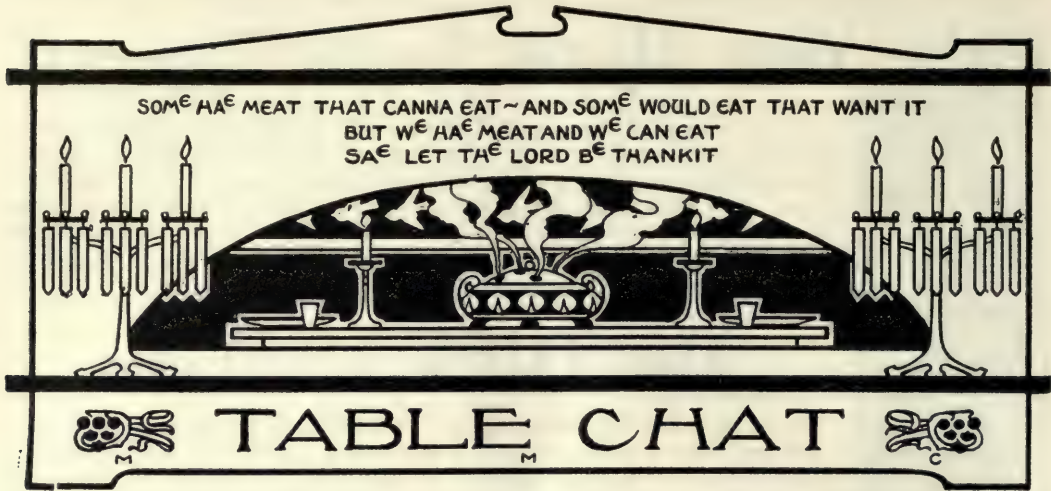
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The Ideal Breakfast for a Child



HE foundations of good digestion are laid in childhood. The mother who lets her two-year-old have a taste of everything on the table, or supplies the older children with pennies for the daily purchase of cheap candies and drinkables will be responsible for their later irritability, poor complexions and the many other troubles which arise from alimentary derangement.

Many children who are physically perfect do not know the taste of meat up to the seventh year, and with so many other wholesome eatables it would seem as if that were quite early enough to serve it, but the same rule cannot be applied to all children; and if the little one is anaemic a chop, tender, juicy, and cooked slowly but not too well done, or a piece of roast mutton or beef may be given once a day, preferably at the midday meal, but if not then, then at breakfast, but never at night. Broiled or roast meat, mutton or beef, should be given, never pork or veal or fried food. Beef tea or broths are not nearly as nourishing as the broiled meat, and boiled meat is not proper food for a child even though it causes thorough mastication, and should never be given for luncheon until after the tenth year, and not then if it can be avoided.

Among vegetables, spinach, carrots

and onions are the most advisable. Potatoes should be baked, as in that form the water is dried out, leaving only the starch cells burst and mealy. Cabbage, turnips, beets and corn are difficult of digestion, and with the exception of corn do not supply enough nourishment to pay for the eating. Children seldom care for salad, but if they can be induced to eat it with mayonnaise dressing it is excellent for them. Sometimes they will eat lettuce sandwiches, made of buttered whole wheat bread with young leaves of lettuce between, sprinkled with salt.

Fruit is more wholesome for young children after it is cooked. Any of the berries stewed, with the addition of a little sugar, also cherries, but these should be given only to older ones, and apples and prunes. Peaches and pears, also apples, may be baked, then the skins rejected while eating. The best way to cook the fruit is to put it in the double boiler with a very little water, say half a cupful to a quart of fruit, and let cook until soft, then add the sugar at the table as required. Many fruits are sweet enough in their cooked form. A little arrowroot or cornstarch will make the juice appetizing, thick and rich. Apples, pears or peaches may be baked in the oven, in the casserole, only a little water being added and the casserole covered. Half an hour is the usual time in a mod-



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TABLE CHAT—Continued

erate oven, and the fruit will be tender, plump and full of flavor. Bananas raw are frightfully indigestible for any one, and when one sees the number of very little children, almost babies in fact, who are allowed to eat the fruit in that state one wonders the infant mortality lists are not longer than they are. Bananas baked, however, are wholesome, delicious and fattening.

Cereals properly cooked are excellent for children, especially when accompa-

never let a child eat an orange with a spoon for some of the fiber will certainly be swallowed—a well-cooked cereal, slices of whole wheat or Boston brown bread buttered, or toast, and a glass of milk. At such a breakfast every desirable element is represented, and in such form that it can be eaten in a short time without hurrying. Bread in some form should always be eaten with the cereal, otherwise the child is apt to swallow it without chewing. The water must posi-



THE IDEAL BREAKFAST FOR A CHILD.

nied by rich milk or half milk and half cream, and when sugary fruit, such as dates or figs, are cooked with them; this doing away with the sugar sprinkling at serving time, which is apt to cause indigestion and acidity of the stomach. Cornmeal mush is fattening and strength giving, but must be cooked in the double boiler or fireless cooker for at least two hours. Three tablespoonfuls of the meal mixed to a paste with a little cold milk, then stirred into three and a half cupfuls of slightly salted boiling water and cooked for the length of time stated will make sufficient for three people. Raisins, seeded, go, or with milk and a very little sugar. An ideal breakfast for a six-year-old consists of either stewed fruit or a small glassful of orange juice—

tively be boiling before the cereal is added, and must continue boiling or the starch cells will not open properly.

Griddle cakes, hot biscuit or muffins should not be given to young children. Whatever bread they eat should have a crisp crust that they may be induced to chew well, with the exception of Boston brown bread, which is more of a cake when it has raisins or dates mixed with it, and which should be eaten only at the morning meal. Whole wheat or gluten bread is excellent, so too is home-made raisin bread, and corn bread when baked in thin sheets and allowed to cool. To make the raisin bread, bring to the scalding point half a pint of milk and stir into it a teaspoonful of sugar and one of salt. Dissolve half a cake of compressed

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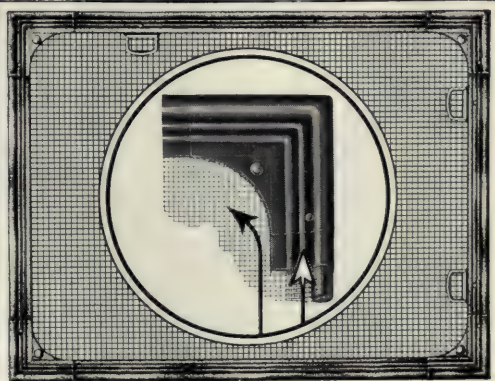
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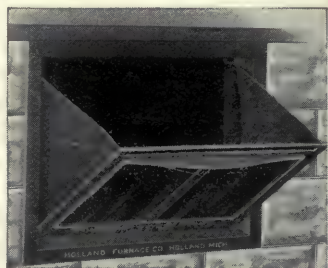
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TABLE CHAT—Continued

yeast in two tablespoonfuls of lukewarm water and add to the milk, then stir in enough sifted flour—probably three and a half cupfuls—to make a dough which can be handled, turn on the floured bread board and knead until velvety and elastic.

In the cake line, gingerbread, ginger cookies, raisin cookies and patty cakes can be eaten, and make nice between-meal luncheons, which every growing healthy child is certain to crave. Provided these be taken at stated times and far enough away from the next meal not to spoil the appetite.

For the cookies mix a cupful each of sugar, molasses and butter, a tablespoonful of vinegar, one of ginger, one egg and a teaspoonful of soda dissolved in boiling water, flour for stiff dough. Roll out and cut in rounds and bake until crisp. The raisin cookies are made of one and a half cupfuls of granulated sugar, a cupful of butter, a half cupful of sweet milk, one egg, two teaspoonfuls of baking powder, a teaspoonful of grated nutmeg and three tablespoonfuls of seeded and chopped raisins or currants. Mix with flour to a soft dough; roll out, wet tops with milk and sprinkle with granulated sugar. Bake in a quick oven.

Two food products which have not been mentioned but which are nourishing and palatable are chicken, roasted or broiled, and rice. The latter should be well boiled in salted water, or in half milk and half water, in the double boiler, or may be made into a creamy rice pudding, the proportions being a tablespoonful of well washed rice to a quart of milk and two tablespoonfuls of sugar. Bake very slowly for two hours.



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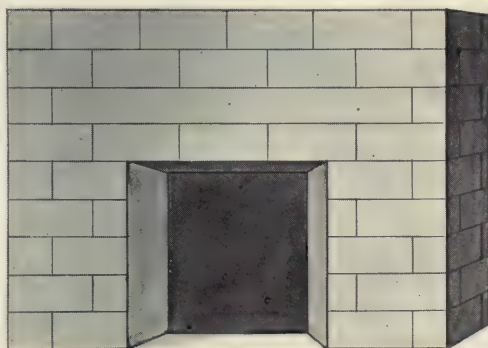
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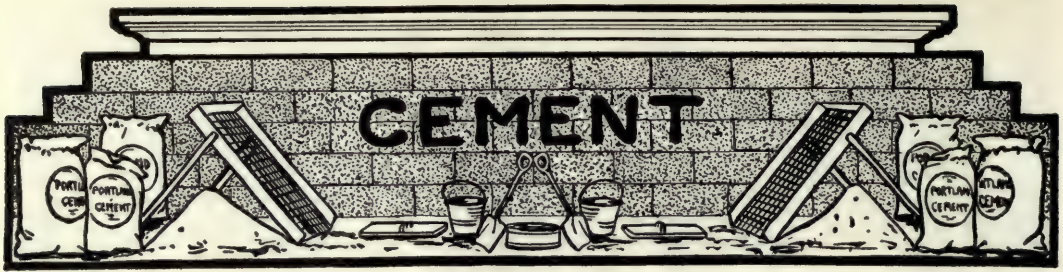


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ROOF of cement mortar must be made from a very good grade of material to give satisfaction; but if care is taken it can be the most satisfactory roof made.

The ideal proportions are one part cement to three parts sand. This makes a very rich mixture, but if made weaker than this it will be more difficult to make water-tight. For a roof of from 1 to 2 inches in thickness, these proportions must be used, but for a thicker roof, concrete mixed 1:2:4 is found to be satisfactory. In this the stone should be no bigger than $\frac{1}{2}$ inch, but smaller is preferred.

It is impractical to install machinery for mixing a small amount as would be required for any reasonably sized roof, so the labor is usually all done by hand, the raw material being hoisted to the roof and the operations performed up there.

The foundation for the roof must be of plank strong enough to sustain the dead weight, allowing a factor of safety of about four. The cracks between the boards should be as tight as for any other form work, to keep the wet mortar from running hollow on the under side.

Care must be taken not to put the mortar in too dry or too wet. It should be as moist as it can hold together.

—Amer. Carp. & Builder.

Concrete Tile Floor.

I should like some information on laying a concrete floor tile. We have a wooden building with two courses of concrete floor laid on joists 2"x8". This floor is rough and unsightly. Later on we intend to erect a concrete building, but in the meantime—as a temporary arrangement—we want the concrete tile floor. How should the tile be put down? Should the wood floor be torn out? H., New York.

It is not the best practice to lay concrete on top of a timber floor, and it is only a make-shift at the best. As you have, however, a rather heavy timber floor, you can lay tile which ought to be satisfactory for a good many years, although in the final analysis it would be only a temporary job. Instead of tearing out the present flooring, it would seem to us better to lay a light mortar coating on top of the present floor. This pre-supposes, of course, that you can take care of the floor level in some other way. If it is necessary to lower the floor to take care of the level, the present flooring will have to be torn out.

In laying a concrete tile floor over wood, make the tile as light as possible, using not more than an inch of mortar and preferably three-quarter inch tile. Put some very light metal fibre of some kind in the mortar, laying it well to prevent cracks. The idea would be, of course, to make as light a concrete surface as possible and keep the dead load at minimum.

Stucco Application.

Please give me some information as to methods and tools used in the application of stucco? P., Minnesota.

The subject is covered quite fully in the book "How to Use Concrete." Ordinarily rough-cast stucco is applied with a paddle. It is thrown against the wall with a quick motion of the paddle, the paddle being stopped in its movement toward the wall just before it reaches the surface which is to be covered. In this way stucco may be put on in almost any degree of roughness, depending upon the ability of the worker to control the movement of the paddle.

—Information Dept., Cement & Concrete Age.



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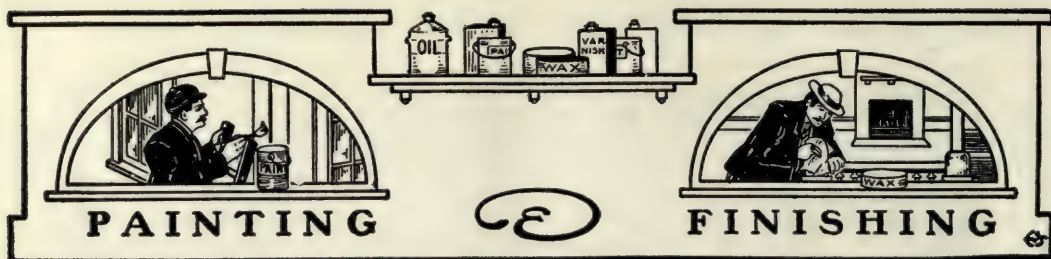
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THE importance of color in any scheme of decoration is paramount, says the "Journal of Decorative Art" of London. Bad or indifferent forms well colored may easily pass muster, but, no matter how good the designs may be, if the color is faulty, then the result is poor; but, beyond the application of color where pattern is concerned, there is an immense field where no pattern is involved, and where the problem is to color only a plain surface. It may appear to some that it is attaching too much importance to a simple thing to describe this as a problem but if any one thinks so he is falling into a grievous error. We have recently seen an instance of this, where an important public building is altered in its aspect entirely by a mistake of this kind. There are three divisions where the color has gone wrong. First, the staircase. This is always an important part in any place, but in the building under notice it is a feature. The woodwork is of polished pine, and age has turned it to a nice brown color. The walls have a paneled dado of the same wood, and the space between the dado and the ceiling is painted. This time it has been done a tone of blue.

Here were the conditions: A rich brown pine roof, a framed frieze and a rich paneled pine dado.

The frieze was painted a warm olive shade of green, full in tone, and decorated with a good bold flowing scroll painted in tones of lighter and darker green enclosing a shield painted with a device. This was very well colored, and had a harmonizing effect with the ceiling. So far so good. The important feature in the room, the coloring of the walls, still had to be determined, because whatever color was placed there dominated the entire room and made of it a success or otherwise.

Unhappily, the decorators or the committee determined upon a laky red, where a terra or orange red would have been best. The result is an unhappy conjunction which does not really harmonize with either the frieze or the dado, and, though the field was powdered with a large open pattern, it failed to give the harmonizing quality required.

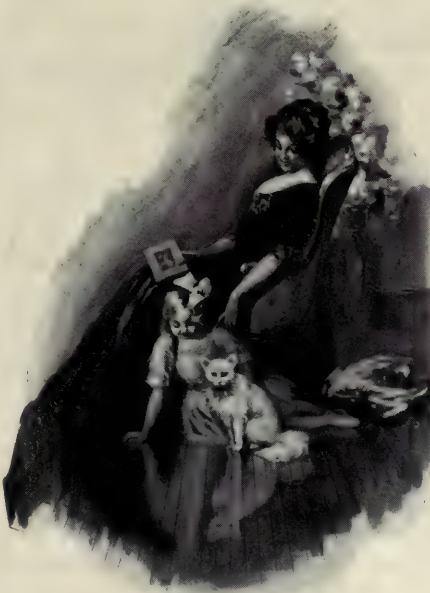
Finishing Cypress.

By A. Ashman Kelley, in National Builder.

Cypress may be finished in more than one way, or in at least two ways, namely, painting and varnishing. The secret of painting cypress lies in the mixing of the paint. Make the first or priming coat of white lead mixed with raw linseed oil and turpentine and a very little driers. Too much driers will cause the paint to dry so quickly that it will not have sufficient time to enter the pores of the wood properly. The subsequent coats may be made rather stiff, and it should be well brushed into the wood.

Interior painting of cypress will do best when the prime coat consists of white shellac varnish, a pure grain or denatured alcohol solution. This should be quite thin, and when dry it should be rubbed down with fine sandpaper. The painting may then be done in the regulation way, as for ordinary or white pine wood.

When cypress is to be coated with enamel paint, first apply a thin coat of white lead paint thinned with turpentine and raw oil, half and half, with a little driers. Let this become perfectly dry and hard, then carefully sandpaper, being particular not to take off any of the sharp edges, etc. This is followed with three coats of flat lead paint, each coat being lightly but smoothly sandpapered when hard-dry. Then apply two coats



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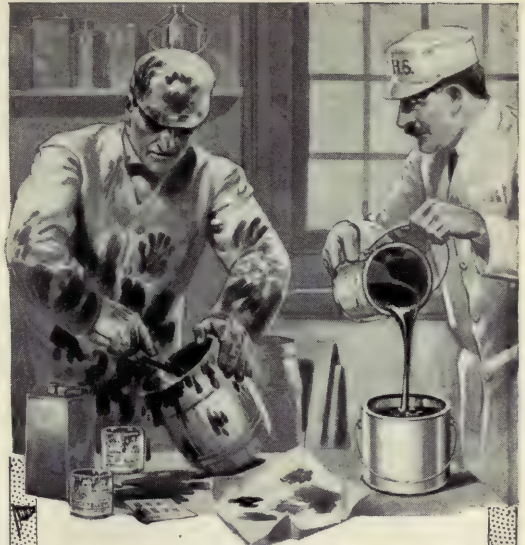
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of flat zinc paint, and one coat of enamel, which is to be rubbed with felt or the like, to produce an egg-shell gloss, and then give the finishing coat, the full gloss enamel.

Cypress may be painted with perfect results, but when one sees its natural beauty of grain and shadings one is inclined to express regret that it should be covered over with paint. Certainly it looks better when finished with varnish. It should, too, be finished natural, though it would take a stain perfectly, and it may be stained in imitation of mahogany, rosewood, cherry, black walnut, and any of the oaks, or it may be colored with stains to any desired shade the fancy may dictate.

Cypress may be filled either with a heavy shellac coat, or with a liquid filler, according to amount a person is willing to spend on the work. Being a close-grained wood it does not require a paste filler. If it is to be finished natural all that will be required after the shellacing is the rubbing and the coats of varnish. But if to be stained, then it is best to

first apply a very thin coat of orange shellac, though for water stain it is better to use a gelatin size instead of shellac. The size in either case is to keep back an oil natural to this wood. Also, the wood must be perfectly dry when water stain is used, as the stain is apt to raise the grain of the wood very badly when it is not well dried out. And cypress is a very difficult wood to dry out. But, once dry, it may be treated with about as little trouble as any wood. Even three coats of shellac have in some instances failed to hold back the natural oil. I might add here that oil should never be applied to this wood. Some think a coat of benzol on the bare wood is very useful, while others advise mixing the stain with strong vinegar, following this when dry with a thin coat of shellac, then with a coat of copal varnish. As water stain will always raise the grain of a wood more or less, it may be better in the case of cypress to mix the stain with turpentine.

Cypress may be finished pretty much as we finish cherry or birch. First shellac it, sandpaper is when dry, then follow with two or three coats of shellac, rubbing down each coat to a smooth surface. Finish the last coat with pumice-stone powder and oil to an egg-shell gloss, or French polish it if preferred. Some treat inside trim with shellac or liquid filler, as previously stated, according to the price of the job, and following with copal varnish, one or more coats, a dull finish being most in favor.

Cypress may be stained to imitate mission oak by applying a stain made from drop black ground in japan, adding a touch of rose pink, mixing the colors with varnish to form a stiff paste, then thinning out with turpentine to make the stain. Strain through cheesecloth. The stain may be made lighter or darker by either thinning more, or by adding more black.

If a greenish effect is desired, omit the pink and add dark chrome green to the desired shade. Antique oak may be obtained by a stain made from two parts of Vandyke brown and one part of raw umber. The final finish may be done either in rubbed or flatted varnish, or will do also wax finished, as preferred.



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—Clay Worker.

Re-cleaning the Cleaned Rug.

"Senator Porter had a large heavy rug in old house and, when moved for builders, he took the rug out, had professional cleaners work on it and store it wrapped free from dust. When rug was replaced in new house, it was placed in attic, about 45 feet from Arco Wand Cleaner. They thought the rug looked very clean and free from dust, but decided to try the new vacuum system on it. The results were astonishing. The rug looked like a different piece of fabric; its appearance was very much

cleaner and brighter, and upon examining the dust receiver was amazed at the amount of dust taken from the cleaned rug. Senator Porter is highly pleased with its work, and with the remarkable ease and thoroughness it does its work."

—Ideal Heating Journal.

Fresh air is air that is cool and in motion and free from odor. Its oxygen and carbon dioxide content are comparatively unimportant. Its feeling of freshness and its freedom from odor are the important things. Pure air is normal, outdoor air having the normal percentage of oxygen, carbon dioxide, nitrogen, etc. We must make that distinction between fresh air and pure air. Modern efficient ventilating systems do what they are built for—namely, keep the air pure. They do not and cannot automatically keep it fresh as well.—Dr. Luther H. Gulick.

Outdoor Sleeping Berth.

In many a home there is some one who would like to enjoy the benefits of outdoor sleeping, but there doesn't seem to be any porch or balcony suitable,—and to build a sleeping porch means too great an expense. These will be interested in a new outdoor sleeping berth which consists of a frame work of light steel angles hung outside a bedroom window. It can be easily attached to any frame or brick building, and provides a practical open-air sleeping arrangement at minimum cost.

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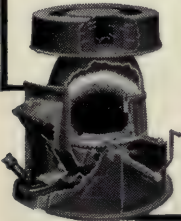
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a warm, comfortable room, and then open your window and get into bed, closing the window after you.

Those who are well can keep well by sleeping out doors; and those who are not well will quickly regain their health if they follow this custom. Out door sleeping is not a fad. Builders are often asked to supply some arrangement of this kind. This one is strong, easily erected and offers a novel solution to the problem of arranging a satisfactory, inexpensive out door sleeping balcony.

look for it, unless they have had previous experience in such matters. Chimneys are often slighted when houses are built by contract, because the work is mostly hidden from sight. In order that a heater or a range may give good service, there must be a constant and uninterrupted draft from the openings in the apparatus to the top of the chimney, created by the wind sweeping across the chimney top. Now chimneys are very generally constructed with two flues, and the partitions between these flues ought



LOOKING OUT INTO OUTDOOR SLEEPING BERTH.

Shower Baths in Houses in India.

Real bathrooms are scarce in the interior of India, as a lady who was traveling with her husband discovered, upon arriving at an out-of-the-way place one evening, says an exchange. The host, when showing them their room, said, pointing to a door: "The shower bath is there." Later the lady went into the bathroom, disrobed, and seeing before her just a tub and a tin mug and nothing more, began to investigate for the source of the "shower." Suddenly she heard a masculine voice apparently in the ceiling say: "If memsahib coming more this side I throwing water more proper."

Chimney Faults and How They Are Remedied.

Many times when a furnace, heater or range fails to give full satisfaction, the trouble lies in the chimney and not with the apparatus, where most people usually

to be built as carefully as any other part of the chimney. As a matter of fact, the flue partitions are often constructed most carelessly, perhaps because the workmen do not realize the importance of having them properly built. Openings may be left, or the bricks may be placed in position so loosely that several fall out after a time. Then the draft is interfered with for the air is drawn through these openings instead of directly up the flue. The extent of this interference depends of course upon conditions, but it may be sufficient to cause serious difficulty in the management of a heater or range that connects with the chimney.

There often is trouble if a fireplace is connected with a flue into which a pipe from a stove or range leads. This may be remedied, however, by having a damper installed in the throat of the fireplace. When the latter is not in use the damper should be kept closed, so that



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the upward current of air will be drawn from the range or stove instead of from the room into which the fireplace opens. When there is a fire in the fireplace, less difficulty is experienced, but the wiser plan is to reserve the flue solely for the fireplace.

Fireplaces which smoke are commonly seen, even in some houses which otherwise are very well designed and constructed. Often this defect may be remedied by making the chimney a little higher or by capping it with a cowl or hood, the latter expedient being especially effective if the smoking occurs only when the wind is from a certain quarter.

Occasionally lack of fresh air in the room is the cause of smoky fireplaces. This may happen easily if the fireplace is too large for the apartment and the remedy for the condition is to construct a small flue from the basement to the fireplace, thus supplying an abundance of fresh air and thereby creating a good upward draft. In other instances there are fundamental defects in the construction of the throat of the fireplace. They can be righted only by tearing out some of the bricks. In a case of this kind which came to my notice recently \$5 was the cost of changing a fireplace which smoked badly into a good one.—E. I. F. in Home and Garden.

Some Comments on Noisy Plumbing.

(From the Building Age.)

In the effort of architects, plumbers and sanitarians to protect plumbing installations within buildings, they should not lose sight of the fact that no matter how well appointed the work may be, or however perfect the operation of the fixtures might appear, the work is far from being perfect if it is noisy when in use. This feature of plumbing work has been too long ignored, and striking evidence of the fact may be observed in most homes, where from any room, or any part of the building, the operation of the water closet in the bath room can be heard. Disagreeable as this feature of the use of plumbing fixtures is, it is not necessary, and can be avoided by co-operation of the plumber, architect and manufacturer.

Most of the noise of plumbing work

can be traced to four different causes, any one of which can be easily and inexpensively eliminated. Noisy water closets are due chiefly to the singing and hissing of water flowing through the supply pipe; to noisy ball cocks, which close so slowly that a disagreeable hissing noise is evident for some time before the water is shut off; to the way the flushing water strikes the contents of the closet bowl, and to the dashing of water against the sides of the soil stack when flowing to the sewer. The noise due to water flowing through the supply pipes can be eliminated by making the fixture branches sufficiently large so that the velocity through the pipes will be very low. This is where the architect can contribute to the noiselessness of plumbing by specifying large size water supply pipes.

He can still further improve his work by investigating the merits of closets more closely, and not assume that all closets will work equally well. Manufacturers must supply goods to fill the demand already created and for this purpose must carry an extensive line of goods suitable for all places, conditions and prices. In many buildings the noise of a water closet is not objectionable, so long as it can be had at a cheaper price than the noiseless kinds, and to fill such orders the manufacturers must stand ready. In the better class of work, however, such as private houses and hotels, noiseless closets are preferable, and the architect will do well to look carefully into the merits of the various combinations, so that when in need of noiseless goods can specify them by the plate number.

Final Cause of the Noise.

The final cause which contributes to the noise of water closets, says a writer in *Modern Sanitation*, is the washing of water against the sides of the soil pipe. When this pipe from the bath room passes down a partition alongside of a dining room or living room, as it often does in private houses, the noise caused by the discharge of a closet in the bath room becomes quite perceptible and very disagreeable. Noise from this source can be deadened to a great extent by installing three-inch instead of four-inch soil pipe.

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SPLINTERS AND SHAVINGS



WITH the ever increasing popularity of the automobile the question of the proper housing looms large. Everywhere there is a demand for garages both private and public.

With this feature of constructive work certain to prove a big feature it is but policy that architects, contractors and builders post themselves thoroughly upon the many various regulations demanded, by both Boards of Underwriters and city building ordinances for the building of garages.

The most widely adopted set of rules relates to the manner of storing gasoline. Practically all authorities agree that it is dangerous to store this explosive within the building in any quantity, and the underground storage arrangement is almost universally required. There is considerable variation as to the depth to which the storage tank of such a system must be buried, and also as to the thickness of the cement casing, if any, which must surround it. The regulations in some cities even go so far as to state the composition which the cement used must have.

Vent and filling pipes for these underground tanks have been given considerable attention. In most cities, the vent pipe must run up to a height at least 10 feet above the roof of the garage and it must be capped with a goose-neck or similar arrangement.

There are a number of stipulations as to the amount and manner of storing acetylene and lubricating oils.

In receiving gasoline from the oil company, the garage is not allowed to admit the supply wagon within its building; the filling of the storage tanks must be done through the filler pipes from the outside. Oil cannot be stored in garages in New York in barrels under any circumstances. Provision is also made for the removal by sponging or swabbing of any

oil which is spilled on the floor of the garage.

No system of artificial lighting other than incandescent electric lights is permitted by New York's Explosives Commission, except if the system be of a type for which a certificate of approval shall have been issued by the fire commissioner. It is further stipulated that all incandescent lamps be provided with keyless sockets, and that all electric switches and plugs be placed at least 4 feet above the garage floors.

The Board of Underwriters of Chicago orders that gasoline tanks must be buried 2 feet below the surface of the ground, and as far from the building as possible, preferably not less than 30 feet. According to their rules, stationary tanks may be located inside garages, but they must have a total capacity not greater than 300 gallons when so placed. The thickness of metal of these tanks must not be less than No. 14 U. S. Gauge (5-64-inch) for capacities up to 180 gallons, and not less than No. 12 gauge (7-64-inch) for capacities of 181 to 300 gallons. The material must be of galvanized steel, open hearth steel or wrought iron. Tanks must be coated on the outside with tar, asphaltum or other rust-resisting material, encased in jackets of at least 6 inches of concrete and buried with their tops at least 2 feet below the upper surface of the concrete floor of the basement (or first floor in the absence of basement). The filling and vent pipes of such tanks must be run under the concrete floor until they reach the outside of the outer wall of the building. The rules in regard to the vent pipes, filler pipes and draw-off pipes are identical with those which apply in New York.

Gasoline cans stored on holders attached to walls of buildings in Chicago must have an aggregate capacity not exceeding 10 gallons and they must be of approved safety type, supported by metal shelves having metal retaining guards, or metal boxes or metal lattice enclosures



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SPLINTERS AND SHAVINGS—Continued

securely fastened to the outside surface of exterior brick, concrete or stone walls. More than 10 gallons of fuel may not be stored outside a building unless in the underground tanks already mentioned. As in New York, the Chicago ordinances state that if open lights are used, the rooms must be completely isolated from gasoline vapors. Calcium carbide, if carried in stock, must be kept in approved metal cans, while the rules for the storage of acetylene gas are especially restrictive. Acetylene tanks must be of approved design and not more than five can be carried in stock, exclusive of those on cars, if they are stored in the open.

The building ordinances of Minneapolis state that whenever any floor of any building is used as a garage and the floors above are used for living or club purposes, the floor over the garage must be of fireproof construction and all stairways or openings leading from it to

the upper portions of the building must be inclosed within fireproof walls. Doors in such openings must be fireproof also, and arranged to close automatically. No regular repair shop may be operated in connection with such a building, in any case. All garages in Minneapolis which are to be more than two stories in height must be of fireproof construction.

The Minneapolis law relative to gasoline storage stipulates that not more than 10 gallons may be stored in any building. This must be in closed metallic cans, not exceeding 5 gallons capacity each.

From this survey of the ordinances and restrictions in effect in various parts of the country, it will be evident that much attention and consideration have been given to the facts that the increasing use of the automobile and the consequently great amount of gasoline and inflammable materials more or less carelessly stored and handled make the utmost precautions and the most rigid restrictions necessary in the building of garages.

—Amer. Carp. & Builder.

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The plate glass top, as it has been adapted to furniture, has long since passed the age of experiment and novelty, and has established itself so firmly on its own intrinsic merits that it has become almost a necessity for the designer and manufacturer of dressers, chiffoniers, tables, tabourettes and bedroom and diningroom furniture in general to accord it careful consideration in originating and carrying out their furniture. Its highly intrinsic value as a protector and beautifier for the splendid grained woods used for tops, and even to the finishes of the tops, that are now so generally used on furniture, is the reason for its coming into existence.

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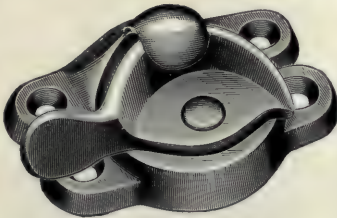
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New Booklets and Trade Notes

The Value of Clay Products.

EVERY Home Owner of the country is interested in a better and more permanent value in home construction as well as in the sanitation of the home. These are matters of both health and wealth and are worthy of the closest thought and consideration. The ignoble sewer in the cellar may be out of sight, but it has largely to do with a sanitary home. If poorly constructed it is a constant menace. Vitrified clay has been shown by the bureau of standards to be the very best sewer material and many municipalities permit of the use of no other kind. In the construction of the home burned clay is equally important as many other materials are also a constant menace. Burned clay is impervious to all the elements and to fire. It reduces the insurance, the up-keep cost and the dread of fire and there is less fuel.

In many parts of the modern model home, clay is used from the porcelain laundry tubs in the cellar to the mantel in the library. Clay tiling for the roof is very popular, and in the art pottery, the refrigerator and the stove, clay is used. To show just how extensively clay products are used in the art, utility and industry of the country, a Clay Products Exposition will be put on at the Coliseum, Chicago, Feb. 26 to March 8. The last clay show was a most gratifying success and is still the talk of the visitors, it therefore is assured that this new show will be worth the attention of every one.

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"Small Farm Buildings" is a book in magazine form issued by the Universal Portland Cement Company, containing 150 pages filled with practical information for the farmer and rural contractor, on the construction of foundations, floors, walls and roofs of small farm buildings. There are also tables of dimensions, of areas, of number and size per linear foot of concrete blocks, and these are supplemented by an appendix of specifications. The Information Bureau of the U. P. C. Co. will furnish this book, and assist with special advice.

* * *

The Western Electric Co. inscribe their new booklet in rose and grey, "Household Helps," very appropriately to the American Woman. The fascinating appliances herein illustrated as also in the kindred booklets, "Flash Lights" and "An American Christmas," are most enticing.

* * *

We invite attention to the interesting monthly "Sanitation," published by the Standard Sanitary Manufacturing Co., Pittsburg, Pa. Handsomely gotten up and a model of good press work, each number contains an article of more than ordinary interest, finely illustrated, as for instance, "Making a Great City Sanitary," by Dan Allen Willey, in a recent issue. Of course the Standard products, incidentally, receive attention.

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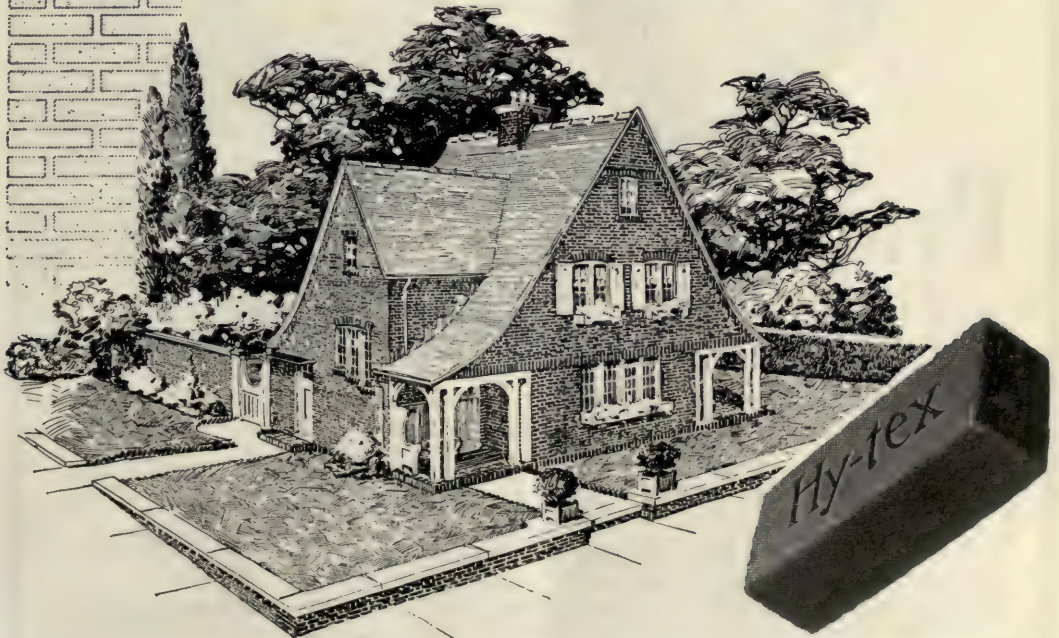
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KEITH'S MAGAZINE

ON HOME BUILDING

WITH WHICH IS CONSOLIDATED

THE JOURNAL OF MODERN CONSTRUCTION IDEAL HOMES MAGAZINE

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STANDING HIGH ABOVE THE STREET WITH A WINDING APPROACH.

KEITH'S MAGAZINE

VOL. XXIX

MARCH, 1913

No. 3



THE OVERHANGING EAVES AND THE RECESSED PIAZZA ARE IMPORTANT FACTORS.

A Massachusetts Hillside Home

Designed by Robert Coit, Architect, Boston

WHEN the architect was asked to build a house on this bit of steep hillside high above the road with all its tall spruces, and the woods of the Middlesex Fells just behind, he must have called to mind his tramps in Alpine valleys, for the house, which we illustrate, suggests forcibly the broad roofed farmhouses of the Tyrol. So obvious is the resemblance that this house is usually called the "chalet." The

writer does not care as a rule for houses that are too plainly exotic in their origin. A copy of a Californian Mission looks a little out of place in a Boston suburb, however interesting it may be as an example of debased Spanish Renaissance. Nor does a Japanese tea house seem the most desirable model for a summer cottage in New England. But so long as returning travelers bring with them recollections and photographs of the strange

habitations they have seen, so long, I suppose, will our towns continue to look like collections of samples from a dwelling-house exhibition.

When an architect, however, as here, is confronted with unusual conditions he should feel free to meet them as best he can, unhampered by preconceived ideas.

The problem presented by a sloping site is not an easy one at best. This will be readily understood by any one who has seen some symmetrical colonial house perched on a hillside with its flat front wall standing sheer and high on a meagre terrace chiseled out of the bank; or some Elizabethan house in a similar position, with its gabled projections sharply contrasting with the contour of the hill, and its accented vertical lines serving to increase the effect of height.

In this case the style adopted allowed the use of a narrow and long plan, and an exterior in which the horizontal lines could be strongly emphasized, with a broad, low roof, without projections to break the level sky-line, and yet permitted all the irregularity desired in the front wall to avoid a monotonous flatness.

By cutting sharply into the hill behind, the house was set as low as possible on the ground, nevertheless the entire cellar wall in front had to show above the grade, with only a narrow level strip in front at the top of the slope. In order to diminish the apparent height of the house, the projection of the diningroom overhangs the cellar wall, and the piazza is recessed under the second story. This treatment and the wide overhanging eaves give broad and deep shadows on the wall which are the important factors in the attractive appearance of the house.

To emphasize further the horizontal lines the walls are covered with wide cypress siding, stained a dull brown, while the shingles of the roof are a tile

red. The wide, unbroken roof shows most effectively through the green of the spruces.

From the street, some forty feet below, the house is approached by a winding path which reaches the curved steps at the end of the piazza by an easy grade. Another path somewhat steeper runs to the kitchen and cellar doors.

Both paths swing around by the side of the lot, and leave the broad slope directly in front of the house unbroken.

The house faces west, affording a wide and delightful view across a valley, but in the rear the outlook is only on the trees and hill just behind. The plan was arranged with this in mind, and all of the livingrooms have at least one window looking towards the west, while the kitchen, bathroom and staircases are placed on the rear. The interior is compactly arranged and designed to meet the needs of a family of average size.

You enter from the piazza through a wide hall, which extends across the house, and which has another outside glass door, under the staircase landing, opening on a level with the ground behind the house, and leading directly into the Fells. On the right of the hall is the livingroom, $14\frac{1}{2} \times 16\frac{1}{2}$ feet in size, with light and air on three sides and having a large fireplace of mottled brown brick with a wide wood mantel shelf. From this room opens the small "den" with its rough brick fireplace and casement windows. Here the walls and the ceiling, which extends up into the gabled roof with exposed beams, are sheathed in wood stained with umber.

The hall, which is ten feet wide, has a simple staircase with balusters sawed in the Tyrolean manner. A seat on the landing looks down into the livingroom through leaded casements.

On the left of the hall is the diningroom, $13\frac{1}{2} \times 15$, with a wide group of windows opposite the fireplace. Beyond and

behind are the china closet, pantry, kitchen and back entry. The back and cellar stairs are in the passage between the kitchen and front hall. The laundry is in the basement where it has excellent light. In the second story no unnecessary space is given to the hall, which leads directly into the four bedrooms and the bathroom. The bedroom over

portant. Much depends upon the number of servants that are to be employed.

Most housekeepers prefer to have, as in this plan, the pantry, china closet and the place for the refrigerator separated from each other and from the kitchen.

There is much to be said in favor of a so-called "laboratory" kitchen with cupboards and cases for dishes and china,



the diningroom opens on a balcony which is large enough to use for sleeping out of doors, and which might be enclosed with mosquito screens. All the bedrooms have large closets and the master's bedroom has two. The attic affords ample storage room and has a finished bedroom for the servant. The third story is reached directly from the first story without entering the second story hall.

The arrangement of the service portion of a house is always interesting and im-

portant. Much depends upon the number of servants that are to be employed. This arrangement proves most satisfactory when gas is used for cooking, or when no servant is kept, and the kitchen used solely as a workshop.

The interior finish is strained wood throughout, designed in the so-called Mission style, and stained in soft browns and greens with burlap dadoes in hall and diningroom stained to match the woodwork.

The Decoration of Our Homes

By Una Nixon Hopkins

PART II



DINING ROOM PANELED IN WOOD—FROHMAN & MARTIN, ARCHITECTS. (See Note D.)

RELATIVE to simplicity as a fundamental principle in furnishing the art of house decoration is akin to the other arts. It is for simple effects that each art is striving. But the home-maker is at a disadvantage! The painter may burn his canvas, the sculptor destroy his clay, or the writer tears into ribbons his unsuccessful manuscript, but the home once furnished must usually be endured.

Note D: A dining room paneled in wood in which the arrangement of dishes, flowers, etc., is in such excellent taste that the room presents a fine example of the beauty of simplicity.

One reason why we do not succeed in the furnishing of our homes is because we buy rugs, hangings, furniture, etc., in one environment, and then place them in another, without due respect to the difference in lighting, tones of wall, woodwork and general atmosphere. The better way is to have things sent home on trial. Whether the windows are high or low, or whether the light is equally distributed in the room, or comes from the north, east, west or south, will affect the coloring to such an extent that it is not safe to decide on color combinations in one light, and then put them in

another; for the amount of light in a room affects everything in it to a marked extent.

If the wall paper that you are considering today is brown, say for illustration—and you are buying it in a dark shop surrounded by all sorts of colors—but expect to hang it in a living room where the woodwork, too, is brown, remember that your paper will appear quite a different tone when hung than it did in the shop. A safer method would be to have a roll or two sent home on approval.

A house should be furnished in one's mind before an article is purchased—but always subject to changes. "Paint more with your hands in your pocket," said a famous artist to his pupil, and so likewise there might be a good deal of advantage in furnishing our houses with our purses locked in the bureau drawer—in order that we might give sufficient thought to the work. A room or a house

should be furnished step by step just as a picture is painted.

The floor, upon which everything rests, should have first place in the scheme, and take the darkest tone of the coloring; the wall the next lighter tone, and the ceiling the lightest. Then comes the placing of furniture. A good rule is to so arrange a room that it will take a good photograph. This will insure against crowding, and placing one article in front of another in a careless haphazard fashion. Next there is the hanging of pictures, curtains and arranging bric-a-brac—the little touches that give atmosphere to a room, and for which no rule can be laid down. Even the arrangement of flowers is an art. Flowers, like jewels, should be used with discretion. The woman of taste wears certain stones with certain gowns, and never too many of them. The wise woman, likewise, will grow in her garden, flowers best suited to her par-



LIVING ROOM IN A COUNTRY HOUSE, ILLUSTRATING GRADUATION OF DARK AND LIGHT TONES. (See Note E.)

ticular house. It is important not to crowd too many bouquets of flowers of different kinds on a table, mantel or writing desk.

Note E: It is a good example of the proper relation of tones. The floor is the darkest, the side walls are somewhat lighter, with a contrasting frieze. And though the ceiling is beamed the plaster

and figures surfaces, or plain and figures stuffs, it is safer to decide in favor of the former.

The time will come probably, when the furniture of the house will be designed by the architect, or he will at least give the hint as to what it should be.

Note F: In this dining room the furniture was planned by the architect with



DINING ROOM AND FURNITURE DESIGNED BY SYLVANUS B. MARSTON, ARCHITECT. (See Note F.)

between the beams is still lighter than the frieze.

As to the specific character of furnishings, individual taste must play a large part. It is here again, however, that the eternal fitness of things counts above all. A simple house must be simply furnished.

The walls of the small or moderate sized house would better be plain for the most part. And wherever there is a question in any kind of a house, between plain

pleasing result.

There is a wide range of good things to choose from in the shops. Reproductions of plain old mahogany pieces are always staple for those who can afford them and they suit almost any house.

Paint and stain—the poor man's friend—may be brought to telling account in the finishing of low cost furniture.

Old furniture may be scraped and stained over or painted with wonderful results. Rugs may be dyed, if they are



THE LIVING ROOM OF A GOOD SMALL HOUSE. (See Note G.)

not right in color—it has improved many a one. “But,” says some one, “what a pity to spoil nice things because they don’t match!” If Whistler, that great master of decoration, did not hesitate to paint the exquisite leather that made his peacock room famous, why should anyone hesitate to alter the appearance of any article of furnishing, if by so doing he can make his home more beautiful.

There is nothing too small to give consideration in the furnishing of the home. The dishes for the table may not appear at first to be part of the decorative scheme, for a diningroom, but note the effect when the table is set, recommended.

Note G: Yellow—light and mellow in tone—was the color used in the small room. Here the spaces were well broken, and window space limited, and there was need of a light, sunny quality of color tone.

It will prove a pleasant pastime and pay in improved environment, a keener appreciation of art and nature and everything that is beautiful. To study to discover why certain colors are not agreeable in given lights—to learn the complements of one color to another—to understand proportion and gradation—to quickly discern the difference between good design and bad, may not interfere with the ordinary routine of household cares, but it will have a tendency to make them appear lighter. If we will but go to work with a good will, realizing the softening effect of beauty, appropriating the material about us to the best of our ability, thinking as well as working, or thinking more than we work—we cannot only hope to make beautiful homes, but we will feel worthy of our homes when they are made, for the enjoyment of our surroundings must be proportionate to the effort expended in their making.

New Types of Cement Houses in Minneapolis



T is fortunate for the architect that there is an endless variety of plan and treatment possible in domestic design; for from him, more than all others, is expected that "infinite variety" which Shakepeare calls the charm of woman, and which without

money in it. Their time is far more profitably employed in designing public buildings, schoolhouses, warehouses, etc., a class of work which is limited by its uses and nature to a few types of design. But fortunately for the home builder there are architects to whom this very



RESIDENCE OF WM. A. BERRY, MINNEAPOLIS, MINN.—ERNEST KENNEDY, ARCHITECT.

question is the chief charm of modern design. Every one knows how uninteresting are the streets or the "tracts," exploited by the land companies; where the same design, for economy in building, is used over and over again, with variations of red roof and green walls or vice versa, or the porch on the east side instead of the west.

Many architects do not cultivate that part of their art which embraces the planning of homes. There is not much

demand of the exigencies of home life upon their patience and sympathy, is interesting. The human quality about the making of homes, appeals to their imagination, and the problems created by differing habits and tastes, differing sites and localities, limitations of cost and application of materials—problems never twice the same are interesting to the intelligent and sympathetic designer of homes, and he finds a real joy in overcoming them.



RESIDENCE OF MR. CHARLES NAEGLE, LYNNHURST, MINNEAPOLIS.

A few years ago, cement plaster was considered a stubborn and unyielding material, almost incapable of translation into pleasing design. With what variety and interest of treatment the cement plaster house can be handled, as well as its practical and livable quality, the illustrations accompanying this article will serve to show. The houses pictured are all examples of recent cement construction in Minneapolis—the City of Homes. They range from the dignified and beautiful mansion, which is our first example, to the modest cottage, which is the last. But each one possesses interest and charm.

The first illustration shows a residence by Mr. Ernest Kennedy, one of Minneapolis' leading architects. Being of recent construction it has still to receive the softening and enriching grace of shrubs and vines, whose small beginnings are apparent in the picture. At present there is little adornment for the sun-parlor on the left, which is so harmonious

and integral a part of the design. That fault will, however, be remedied when the newly planted vines are trained beneath the windows, lending their softening grace to the grey plaster walls. The location is almost park-like, being set well back on a boulevard, which gives a view of one of the lovely small lakes for which Minneapolis is famed. The design is very simple and of no particular type, though it has English characteristics. The exterior is of rough cast cement in the natural grey, with the roof and trim stained a soft brown. The red brick of the foundation and entrance abutments add a note of color. The curves of the sheltering hood over the main entrance melt into the lines of the house in a particularly agreeable manner. Interest is given to the front facade by the slight overhang of the second story, becoming more pronounced at the corner projection, and the delightful grouping of the openings. How much the trained artist can do by means of simple devices is

shown in the happy effect produced by slightly recessing the group of mullioned windows over the main entrance with their hood of roof projection. Nor has the architect resorted to the many-paned window for "featuring" this delightful exterior, except in the one group before referred to. His windows are of the conventional type, yet no lack is felt. In spite, therefore, of the dictum of old Anthony Trollope that "no other sort or description of window than the many-paned mullioned window is capable of importing half so much happiness to mankind"—we have undeniable proof that they are not indispensable in the mellow charm of this delightful interior.

The interior plan consists of living room, dining room, den, breakfast room, kitchen and sun-parlor on first floor, while on the second floor, besides four large chambers, there is a sewing room, dressing room and two bath rooms.

The house is 57 ft. 4 in. by 24 ft. 6 in., exclusive of sun-porches, and is finished in birch throughout.

The home of Mr. Chas. Naegle in Lynnhurst, Minneapolis, though of much simpler type and less cost, yet has many points of interest. This picture also was taken when the house was just completed and lacks the touch which the vines that will twine up the brown lattices will give. A flower box is to be placed beneath the box window over the entrance, which will add another nice bit of detail.

This house is also of grey stucco, with a decided pebble-dash in the rough cast. The brown roof has ridge tile of light red, the lattice and trim are stained the same soft light brown. The cost of this house complete was about \$5,000, and is a style particularly suited to the small or medium sized dwelling.

In this northwest country of searching gales and storms, builders have found



THE GABLED PORCH SHELTER IS IN HARMONY WITH THE GENERAL DESIGN.

that walls of rough cast cement possess excellent resisting qualities, and this reason, aside from their appearance, has led to their frequent use in the architecture of this section. Similar considerations of climate also lead to the choice of steeply gabled roofs, because of their excellent storm-shedding qualities, though as often this type is chosen because of the greater amount of space pro-

sun-parlor, which, however, we will readily forgive for the sake of the balcony afforded to the second floor. This sun-parlor is ceiled in natural pine.

In this, as in the previous design, the rough cast of the exterior is carried over the foundation of hollow tile, right to the ground, giving that air of modest, unpretentious hominess, so desirable in a small house. The color scheme is again



BUNGALOW OF GREY STUCCO.

vided in the upper stories, thus economizing building cost. In the present instance a large billiard room and a bed room, besides some storage space, are provided on the third floor. While this house is therefore in marked contrast to the low-roofed design of the preceding two, it is yet a most attractive type for the medium cost house. The low windows are well proportioned to the elevation of the cottage. The gabled porch shelter is in harmony with the general design, and the only feature which seems slightly at variance is the flat roof of the

grey stucco with brown roof and trim, a treatment which experience has found to be both restful and economical. The cost of this house was about \$6,000.

No showing of plaster houses would be complete without including the omnipresent bungalow and the example given shows one of the newest creations in this type of dwelling. There are as many minds in architectural design as there are in the matter of bonnets, therefore the numerous eccentricities and oddities of this design may prove interesting to someone in search of novelty.



SIMPLE SUBURBAN BUNGALOW OF GREY STUCCO.

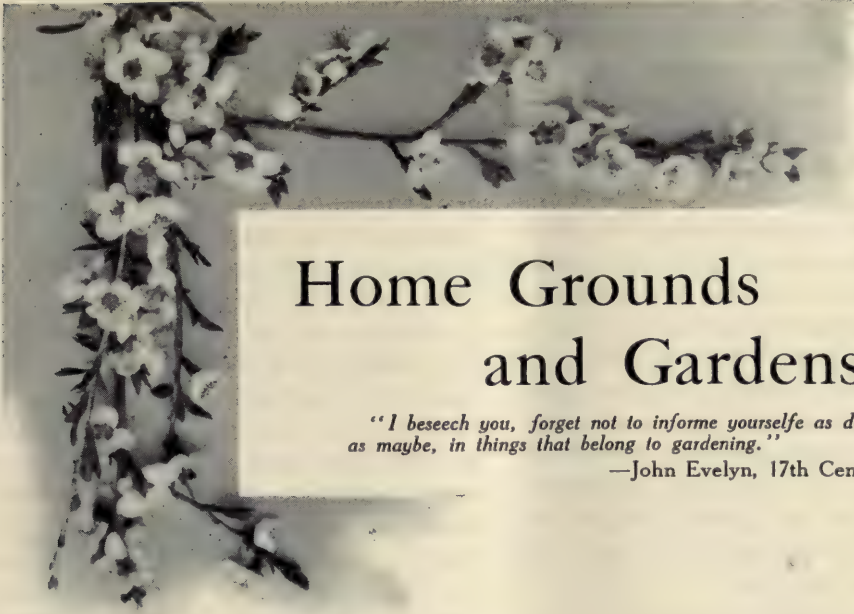
Far more pleasing to the ordinary passer-by, as well as to the artist-architect, is the simple bungalow of grey stucco with moss green roof and trim on one of the suburban streets of Minneapolis. The long, low lines, absolutely simple and plain, give a feeling of restfulness. The slight upturn of the wide and sheltering roof over the front adds a touch of interest. It is a frank use of common material, made pleasing by its proportion and balance, and pleases us

by reason of its frankness. There is no straining after effect, to achieve only grotesqueness. Bungalows have come to be a permanent form of dwelling in northern climes, as well as the south, having been adapted to use in the former by sounder construction.

The small stucco cottage last shown, costing about \$2,000, is an example of the extent to which cement plaster is used in dwellings both great and small. If carefully handled this material redeems a small dwelling from cheapness and invests it with a touch of dignity not conferred by clapboards of wood. This little cottage is a good example. On the other hand, nothing more atrocious could be achieved than some of the "mud huts" that masquerade as plaster cottages. The instances of cement plaster construction here given have been taken at random from a multitude of more ambitious erections, as thus affording a truer glimpse of the average dwelling; and are in the main helpful examples of what is being done in the majority of homes of this class.



Small Plaster Cottage in City Outskirts.



Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

—John Evelyn, 17th Century.

Planning and Plotting the Garden

By Elizabeth Vaine

IT is seldom that one can plan a garden in just the location as to soil, exposure and relation to the house that one might wish as, except in those fortunate instances where one has large grounds the arrangement of which are already satisfactory or in such a stage of development as to allow much latitude in planning the garden, shrubbery and general planting, the small amount of ground available for a garden is quite arbitrarily fixed beforehand and one must do the best they can with what the Gods allow. In the usual city or suburban lot, this will usually consist of a few rods of land in the rear of the house, but even this limited amount of space can be made to yield very attractive and satisfactory results if a little care is given to the laying out of the beds and a careful planting scheme is followed.

Strangely enough, the ordinary farm home, where land and all the essentials

of successful gardening are available for the purpose, with little expense and the minimum of labor, is lamentably deficient in attractive surroundings of this sort, a wood pile, chicken coops and litter of sorts being much more in evidence than shrubbery or attractive flower beds.

As far as possible selection should be made of a site which enjoys a fair amount of sunshine, as it will be found that there are many more sun-loving than shade-loving plants, and, given a suitable position for the former, it will be a simple matter to provide the few shady nooks required for the latter.

The soil should be a good warm loam, but where it is impossible to select a site with favorable soil it will be found practicable to supplement or entirely replace the unfavorable soil with that of a better quality by first laying out the garden and then removing as much as possible of the soil from the beds and

replacing it with that which is satisfactory. This, while entailing considerable initial labor and expense, will be found a very satisfactory expenditure in the end. When, however, this is out of the question, as in case of town or city lots, where the cost would be prohibitive, much may be done to change the character of an uncongenial soil by the use of fertilizers and wood ashes, and by the establishing somewhere in an inconspicuous corner, a compost heap on which all decayed vegetable matter about the place, all kitchen and laundry slops and refuse, shall be deposited to produce, in time, the humus which is so essential an element of plant food and the lack of which is the chief cause of poor, thin soil, arid and unretentive of moisture.

A stretch of land lying out in the morning sunshine, but protected from the too direct rays of the afternoon sun is the best possible exposure. Good drainage is essential and should be secured, where natural drainage is lacking, by laying tile or excavating out the soil beneath the beds to a depth of two feet or more and filling in several inches of broken stone, coal cinders and the like. The tile drainage, however, is preferable and will be found more practicable in the long run.

The garden should be close to the house for convenience in working and always, if possible, at the side or rear of the house. A position where it may be enjoyed from the dining room or living room windows affords much pleasure and brings the garden within doors as it were.

The laying out of the garden will be largely a matter of individual taste, but the simpler arrangement of beds will be found more satisfactory in the end than elaborate arrangements, which call for much labor in the upkeep. Long straight beds afford the best opportunity for the planting of hardy perennials and are more easily cared for than round or tri-

angular beds. Usually, however, it will be found advantageous to plant long rows of shrubbery and perennials along boundaries and fences leaving the garden proper for smaller growing stuff.

After many experiments in laying out gardens I have come to like best the radiating or fan-shaped beds which, commencing from some central, ornamental point, extend, in parallel rows, to the circumference of the garden, widening as they retreat, until, from a narrow bed of from two to three feet at the beginning, they reach an extent of a rod or more at the rear, according to the size of the garden. Such an arrangement allows a very natural growth of the garden, as it is only necessary to go on extending the lines of the beds from year to year, providing, always, that one has sufficient room in the rear for the extension. This is, practically, the only form of garden which can be enlarged without changing or interfering with the original plan. The garden so planned may take the form of a complete circle, a half circle or a square and the margin may consist of an encircling hedge, insuring privacy or a bed of some low-growing flower, as verbenas, pansies, dwarf nasturtiums, heliotropes or any preferred plants. Personally, however, I prefer the hedge as insuring a certain degree of privacy. I do not wish to be understood, though, as advocating the use of an evergreen hedge, as evergreens are not the best neighbors for flowers, but rather some of the flowering shrubs, as hydrangeas, tartarian honeysuckle, rugosa roses, Spirea Van Hutte or similar plants. The center of such a flower garden offers possibilities of most interesting development, as it may be the site of a lily pond, a sun dial, a summer house or a beautiful tree with circling seat, or merely a bit of beautifully kept turf, with seats and possibly an umbrella shaded table for afternoon tea.

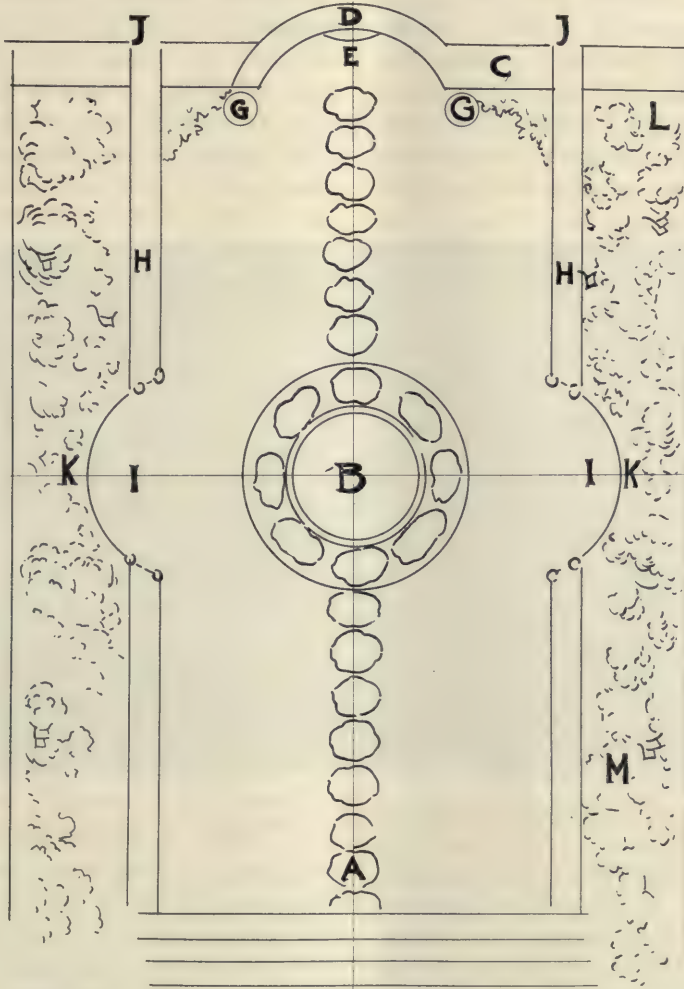
The accompanying diagram will prove

helpful in planning the garden, even though it should not be adopted in its entirety.

Plan "A"

Will be found very simple in detail and easily understood, but possessing a somewhat expensive construction, but as this

Stepping stones, which may be of native granite or cement, should be of ample size for convenience in use, and be placed close enough together to allow of an ordinary gait in walking; they should be sunk in the ground sufficiently to be on a level with the soil, so that in cutting



is of a permanent character, not needing renewal and costing little in up-keep, it need not be an objection to anyone to whom the plan appeals.

As seen in the diagram, the plan is oblong, conforming to the plat of an ordinary back yard. A row of stepping stones leads from the rear of the house directly through the center of the plat.

the lawn the mower may pass over them unhindered, otherwise much tedious and expensive trimming with shears will be required.

The stones may surround the pool or not, as desired, but I think it will be found more satisfactory to have them do so and to connect with the continuation of the walk beyond the pool.

The pool may be of any preferred dimension, but a twelve-foot basin will usually be sufficiently large unless the plat of ground is unusually large. The central path ends at a stone wall in the rear of the lot. This wall, commencing at the corner of the lot, is straight, but sinks into a concave curve as it approaches the center of the plat. Generally considered, this curve should conform in diameter with that of the pool and should be paved with stone or cement and given a pergola roof, shaded with vines. Seats at each side will provide a grateful resting place and a fountain should gush from the center of the wall into a shallow basin, or a well head may occupy the niche.

The angle of this wall with the side boundaries of the lot should be softened by a mask of shrubbery and a wide planting of shrubbery and hardy perennials is provided for along the sides of the lot. Convenient gravel walks border the shrubbery and at points opposite the pool broaden into half circles which form delightful shaded nooks which should be provided with high-backed seats and, if desired, vine-covered roofs.

If one prefers to substitute red brick for the walls and stepping stones the effect will be altogether charming.

The planting of the shrubbery will depend, in great measure, on the surroundings, whether there is an objectionable view to hide; it is desired to isolate as far as possible, the garden from its neighbors, or if only partial seclusion is desired. If complete seclusion is aimed at then one should begin the shrubbery by planting either tall-growing shrubs, or small flowering trees, such as the double flowered cherries, magnolias, Bechtell's double flowered crab, dogwoods, or the purple leaved beeches, plums, silver birches, using the lower-growing shrubs for the front of the shrubbery and making selection of several varieties bloom-

ing at different seasons of the year. For instance, if one will plant liberally of the deutzias *Gracillima*, *Pride of Rochester* and *Lemoine*, they will have from these a succession of beautiful bloom through May and June; then by using the new *hydrangea arborescens* and *H. Paniculata* there will be secured a wealth of bloom from July until well into September and the season will be still further prolonged by the use of *Altheas*, which may be planted back of the *hydrangeas*. The *wigelia Eva Rathke*, which is a very strong, rich color, is a continuous bloomer and very useful in the shrubbery border and gives a stronger note of color than other varieties of the plant.

If only a low border between lots is required, then use should be made of low-growing shrubs, such as *deutzia Gracillima*, *spirea* *Anthony Watterer*.

This design may be readily adapted to a temporary home by the use of such tall-growing plants as *cannas*, *ricinus*, *caladiums*, *cleoms*, *cosmos* and the like, with annuals in front of these. Of course, in the temporary garden the lily pool will not be feasible, but a round bed of pansies, verbenas, geraniums or other low-growing things may be substituted, and chicken netting covered with Japanese morning glories used in place of the rear wall.

Plan "A" to Walled Garden.

- A—Path to rear of grounds.
- B—Lily pool.
- C—Rear wall.
- D—Alcove in rear wall.
- E—Fountain in alcove wall.
- G—Tubs for ornamental vines over alcove roof.
- H—Paths at side of lawn.
- I—Alcoves in shrubbery opposite pool.
- J—Gates at end of paths.
- K—Vines over roof of alcoves in shrubbery.
- L—Tall shrubs or ornamental trees.
- M—Low shrubs.

Sugi Finish and Its Uses



A GREAT deal of the charm pertaining to certain Japanese forms of decoration lies in the fidelity with which native processes are followed in the producing of distinctive effects.

In our reference to Japanese interiors on different occasions, as well as to Japanese furniture of various types, mention has been made of the effective treat-

credit for its introduction in this country is due. The idea came to Mr. Bradstreet that by scorching certain varieties of wood it would not only be possible to raise the grain, but to give a weathered effect for interior finish, and although beautiful results were obtained with some of other varieties of wood, it was only with cypress that all conditions necessary to success were found to exist.



Courtesy John S. Bradstreet.

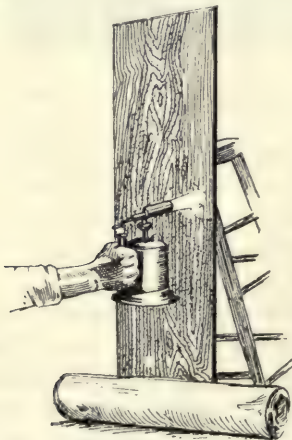
HALL OF THE BRADSTREET STUDIO IN SUGI FINISH.

ment of wood to obtain what is called "sugi" finish. Sugi wood in Japan is a favored material for interior work and somewhat resembles our cedar. The old wood dug from swamps, poetically known as "Sugi of God's Age," is highly prized for its beauty, and it is the peculiar grain and soft finish effects characteristic of this wood that give rise to the term sugi finish. Sugi finish in this country is an effect produced by the action of heat on cypress wood, and we believe that to John S. Bradstreet, the Minneapolis decorator, a great deal of the

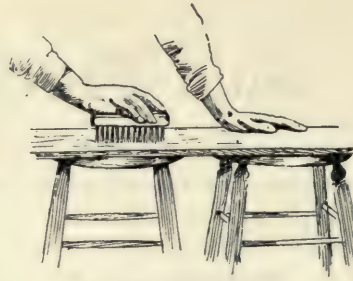
This was accounted for by the fact that cypress is practically the only wood which does not contain pitch or rosin which would cause it to flame when intense heat was applied.

The process is very simple. The lumber must first of all be bone dry, preferably not over five-eighths of an inch thick, although good results have been obtained on heavier lumber, and in the case of paneling the finish is applied to the wood before it is put in position. The boards are so placed that they are easy of access, and the flame of a paint-

er's gasoline torch is slowly passed across the face of the board, forward and back, as shown in our illustration, Fig. 1, until the whole surface is blackened. The board is then set aside for at least forty-eight hours to recover from the warping which takes place during the burning. Next the surface of the board is rubbed with an ordinary steel-wire brush, as shown in Fig. 2, until the charred portion is removed and the grain brought into prominence, the heat having charred the soft summer growth and merely colored the hard grain of the winter wood. By the removal of the entire charred portion the grain of the wood is thrown into considerable relief, the coloring varying from the almost black appearance of the hard growth to a light tan, according to the depth of the rubbing. The rubbing may be lengthwise or across the grain; the deeper the rubbing goes the lighter the effect and the greater the contrast will be. Finally, the brown dust is removed with a dry bristle brush, or a scrubbing brush. If a glossy surface is desired, a light coat of floor wax may be applied, but varnish should not be used, as the result is not pleasing.



Burning the Wood.



Rubbing Out the Wood.

Various color effects can be produced by following up the sugi process with the application of a stain or pigment. A suggestion for the use of the latter is found in the old Japanese carvings, which retain traces of a chalky paint in pastel tints. Floral designs are painted by the Japanese in pastel tints of greens, pink and blue on panels in sugi finish. For such work the contrast in the grain is kept very moderate, the whole surface having a rich brown color. This appearance can be secured by applying a coat of "flat" white lead paint and wiping it off immediately from the high parts of the grain with a handful of cheese cloth.

For interiors the figure of the wood is brought out in so pronounced a manner by the sugi finish that the wall covering used in connection with woodwork of this character should be very quiet, either a neat diaper pattern of solid color or a plain weave, while draperies and upholstery of short-pile prove satisfactory.

The simplicity of the process and the fact that the boards best suited for this finish are those which have a slightly raised grain and are in consequence undesirable for ordinary work, make this finish economical. In the selection of lumber "checks" and "splits" must be avoided, but the heart sap or blue stain is not objectionable.

EDITOR'S NOTE.—The above interesting account of this unique wood finish is of so much interest that we reproduce it in part from a recent number of "The Upholsterer."

Where to Place Radiators

By Louis Christie, Architect

ONE of the most vexing problems the architect must face is the location of radiators. Most architects are perfectly capable of choosing the right locations, for they are entirely familiar with what is required in the way of space, but somehow the placing of radiators is sometimes neglected. There are so many details in connection with drawing the plans that radiators have to be put on the plans hurriedly, frequently resulting in poor locations.

Every radiator on the job should be shown on the plans—indeed, when a building is first designed, radiators should be considered and wall space arranged accordingly. No matter how proficient a steam fitter may be he cannot squeeze a 75-foot radiator in space provided for a 50-foot. When heating has not been considered from the start and the location of radiators is left to a hit-or-miss calculation after the building has been started, nine times out of ten there is trouble.

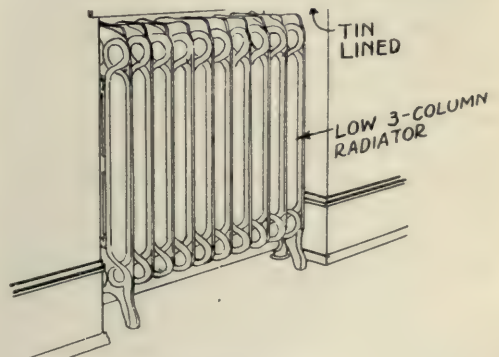
Architects have discovered that the closer they stick to the sizes most used, the easier it is to get what they want, and get it promptly. Manufacturers naturally carry the largest stock of ordinary sizes, so standard sizes can usually be obtained without delay. When it comes to sizes little used, time consumed sending in a special order to the factory and getting the goods on the job is frequently a source of considerable annoyance to the owner, who cannot understand why it takes so long to get his radiators. Often ordinary sizes might have been used and they would have been just as satisfactory, with the added advantage

that they could have been found right in stock.

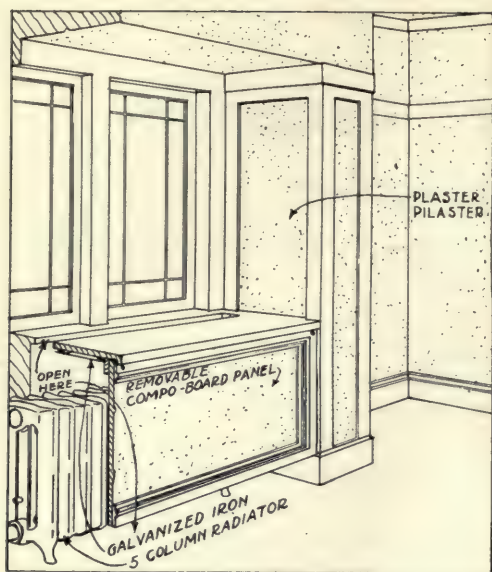
The ordinary patterns of single-column, two-column, three-column, four-column and five-column radiators, with heights from 20 to 44 inches, will provide for the majority of cases. In fact, the requirements of most architects are contained in fewer sizes than these, for the majority of radiators are 38 inch, three-column (for wall locations), and 20 inch, five-column, for window radiators.

What are the best locations for radiators? No two men will agree precisely on this point. Steam fitters want radiators put where they will be the most effective, regardless of appearances, and architects are sometimes inclined to tuck them away in corners where they will be inconspicuous, regardless of efficiency. Between these two diametrically opposite points of view the poor owner stands.

An ideal arrangement for window radiators is shown in Fig. 1. A niche for receiving the radiator is left in the wall directly under a window. Above, the



Recessed in Niche.



Concealed Radiator with Radiation Slots.

wide window sill extends out over the radiator, though it should be kept high enough above the latter to permit free circulation of air between the radiator and under side of the sill.

Many architects have come to adopt this method of installing window radiation as it gets them out of the way and does not decrease their efficiency. In building hollow tile houses, architects provide for radiator niches under windows.

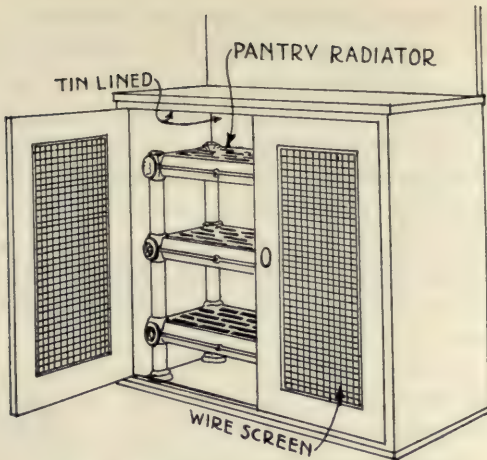
All walls are not thick enough to permit of a niche deep enough for a radiator, but thin walls can be utilized in the same way by furring out a pilaster on each side of the window, then increasing the depth of the niche by the projection of the pilaster. Fig. 2 shows one very good method of doing this. Under a group of casement windows the radiator is placed in a niche made by building a pilaster on each end. Pilasters are of plaster, trimmed on the corners with casing, and a plaster screen is built in front of the radiator to conceal it from view.

Another good place for a radiator is under a seat, when it is possible to make

the radiator enough larger to compensate for its inefficiency (owing to the obstruction to circulation offered by a seat). Many architects have learned the convenience of locating ordinary radiators under seats, but their unfortunate experiences have taught them that heating efficiency is greatly reduced when a radiator is so placed. Anything that interrupts the free circulation of air to and from a radiator lowers its efficiency, be it nothing more than a plank over the radiator. For this reason seat radiators, very desirable from the standpoint of appearance, should always be increased in size. Fig. 2 shows a good method practiced in the office of a Chicago architect. The seat is left entirely open in front, the seat top being supported by a thick cleat. At the back of the seat a slot is left to permit heat to rise from the radiator. Usually a sheet of tin is furred down under the seat to prevent excessive heat from shrinking the lumber.

Of course, only the driest of kiln-dried lumber should be permitted in a place of this kind. Not only is it necessary to see that the lumber is dry when sent from the mill, but it must be kept dry after it reaches the building. Otherwise the woodwork, being damp, will dry out and shrink.

It is doubtful if a radiator should be built under a seat unless the seat is made in such a way that it can be readily removed in case repairs are necessary. This may be done by having the top on hinges. In one house I know of the owner left his bedroom window wide open one winter's night, after turning off the radiator (under the seat). The weather turned very cold during the night and the hot water radiator froze, bursting a section. At breakfast a drop of water went splash on the owner's plate. He looked up and was amazed to see the ceiling saturated with water. Rushing upstairs he found water spurting from under the seat. Seiz-



Improved Radiator and Plate Warmer for Pantry.

ing the seat, he attempted to get it out of the way in order to reach the radiator, but there was nothing doing. The carpenters who put it in, built it to stay—and stay it did, in spite of the most vigorous wrenching. Finally the owner realized what had happened and with presence of mind he opened the window again. In a few minutes the leak stopped.

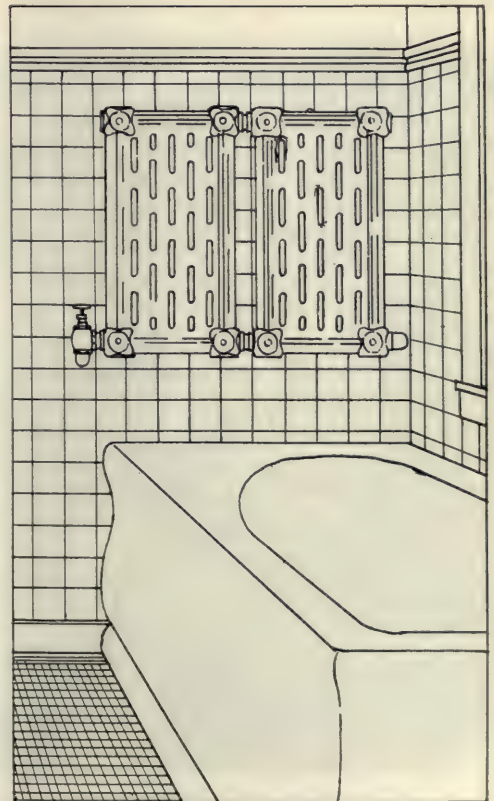
When the steamfitters arrived it was a pretty ticklish operation drawing the fire from the heater, thawing out the radiator and lowering the water down below the broken section.

In a pantry, it is now considered best practice, in the offices of many architects to put in a regular pantry radiator under one of the cabinets. See Fig. 3. Curiously enough it was an architect, who first conceived the idea of using two wall radiators in a horizontal position for a combination plate warmer and radiator. He installed such a radiator on one of his jobs, using two wall radiators held at the proper distance apart by short legs of pipe. The radiator worked out so well as a plate warmer that it attracted considerable attention. Other architects and heating contractors copied the idea until now the pantry radiator has come to be a standard fixture.

When a pantry radiator is put under a

cabinet, the woodwork above should be protected by a sheet of tin or galvanized iron attached to strips, in order to provide an air space between the radiator and the woodwork. Doors on the locker containing such a radiator usually have panels of screen wire, so that heat from the radiator can be utilized to warm the pantry, and no further radiator in the pantry is required.

Wall radiators have come to be used quite extensively in narrow corridors where space will not permit larger radiators, and they will be found efficient and practical. A new place for the wall radiator is in small bathrooms where space is restricted. In such a room some architects specify wall radiators attached to the wall just over one end of the tub (the latter being placed under a window). Locating a tub under the bathroom win-



Wall Radiators Are Excellent for Bathrooms.

dow seems to be the least wasteful of space and for this reason in small bathrooms architects frequently locate tubs in this manner. When the wash bowl and stool are in place there is frequently no space left for the radiator, hence the growing practice of using wall radiators. Located over one end of the tub near the window where cold air enters, wall radiators are entirely practical.

Single column radiators are convenient in a narrow hall where wider radiators would be impossible. Several architects have succeeded in concealing wall radiators behind a screen or grille, by taking for them some of the space from a closet built adjacent to the hall.

One of the best places for a vestibule

radiator is behind an open bronze or wood grille, permitting free radiation of heat and at the same time partially concealing the radiator. This development of the vestibule radiator has really been brought about by the method usually employed in the vestibules of office buildings. Architects, noting the neat way in which such radiators are concealed in buildings, have discovered that the same method is effective in houses.

Another good place for the hall or vestibule radiator is under the floor—indirect, with a register above. Indirect radiators are also ideal in a livingroom or diningroom; they are comparatively easy to install in any room on the first floor.

EDITOR'S NOTE.—The suggestions contained in this article are of such value to intending homebuilders that we give it an increased publicity by reproducing in part from "Radiation."



RADIATOR UNDER WINDOW SEAT IN AN IDEAL CRAFTSMAN INTERIOR.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 406 GEO. M. KAUFFMAN, Cleveland, Ohio
 B 407 BUNGALOWCRAFT CO., Los Angeles, Cal.
 B 408 CHAS. S. SEDGWICK, Minneapolis, Minn.

Design No.

B 409 KEITH'S ARCHITECTURAL SERVICE, Minneapolis
 B 410 ARTHUR C. CLAUSEN, Minneapolis, Minn.
 B 411 ARTHUR WEINDORF, Long Island City, N. Y.

Design B 406.



SUCCESSFUL solution of the problem of small cottage planning is here shown. It is an example of one of the charming yet moderate-priced types of domestic architecture which will increase in charm with age.

This house has been designed to meet the ever increasing demand for beautiful, practical and durable homes of low cost, and its beauty lies in its form, its windows, its low sweeping roof and the combination of material of which it is built. The second story is practically and apparently well supported and the eye rests on the construction with a feeling of confidence.

The rough brick of first story (varying in shade from light to dark red, and laid with large raked joints), in combination with the wide clapboards of second story, carry out a rustic effect and make the house really picturesque.

The color scheme of this house is a moss green roof, green blinds, white clapboards, with trim, doors, windows and lattice to match.

The interior is compact and convenient. A large fireplace is in the center of the livingroom. Sitting in front of it one can see up the open staircase to attractive windows on the landing, and to the right through French windows one can see into the diningroom, where cheerfulness is assured by means of a goodly number of artistic windows.

A veranda has been placed on the side

of the house with entrance through French door to livingroom, thus assuring privacy and a view to the garden. This would be a delightful room in winter if enclosed with glass and heavy muntined wood sash; if a southern exposure it could be turned into a miniature garden.

The second floor contains four chambers, a bathroom and a sleeping porch. The attic contains servants' chamber, bath and storage space. The basement contains a laundry, storage and cold room and coal bins. The minimum cost is \$5,000; the maximum \$5,500.

Design B 407.

We illustrate this month a very convenient little five roomed bungalow which the designer states has been built many times in different sections of the country at costs running from \$1,400 to \$1,700. It would be difficult to plan a little house with more good features, more attractive and artistic as to its exterior and more convenient and cozy inside. The floor plan is distinctively a practical one and will repay careful study. The rooms are of good size for a small family and the bay windows in the livingroom and diningroom add beauty to this little home. The bedrooms have ample closets and are convenient to bath.

The diningroom has a large open fireplace, the chimney of which carries two flues, one for the kitchen. A handsome built-in buffet is in the diningroom alongside the fireplace.

The livingroom and diningroom con-

nect by a wide buttressed opening forming when required practically one large room. The bookcases are built in the buttresses and may open either in the livingroom or diningroom. The small hall beside the bathroom connects with nearly every room in the house with minimum waste of space. The kitchen has built-in full cabinet style cupboards, closets and bins placed exactly where they will be found most convenient.

The exterior of the house is covered with rough weatherboarding stained, and the trim is surfaced, for painting. The front gable is finished in stucco with rough pebble dash surface and half timbering.

Design B 408.

This house is planned with a wide front, the main house being 36 feet and the piazza 12 feet, making 48 feet width by depth of 28 feet, and is estimated by the architect to cost \$3,500, exclusive of heating and plumbing. It sets low to the grade and the stories 8 feet 6 inches and 8 feet in height with the roof cornice brought down close over the second story windows.

It is a sunny and pleasantly arranged house, with a large livingroom across the main front and a porch and vestibule entrance at the left. In the center of the livingroom is a wide fireplace, with recessed book shelves on each side, and at the right a wide opening into the diningroom. The stairs are liberal in width and on the combination order, with grade entrance to the basement. The piazza or sunroom is at the left and connected with the livingroom by wide French windows is 12 feet in width by 14 feet in depth. Inclosed with glazed windows and screened.

The second floor has three large bedrooms and one small bedroom, each provided with ample clothes closets. The bathroom is roomy and well located.

There is an attic stairway leading to the upper floor used for storage purposes. There is a fine sleeping porch over the piazza, connected with the main hall, screened in and glazed. The basement is full size with rooms for laundry, heating plant, fuel, etc. The inside finish of first floor is designed to be of fir with mission stain and floor of oak, the second floor is finished in birch, with white enamel for the casings and red mahogany stain for doors. The exterior of the house is finished with cement stucco, rough "pebble dash."

Design B 409.

The next house to be described is that of quite a pretentious city residence which was planned for a physician living in Virginia. The exterior walls are brick construction and the trims are cut stone. Porch floors are of tile. The house is designed for a most permanent building, with the dividing partitions throughout the basement of brick, giving good bearings for the super-structure. In width it is 45 feet 6 inches, with a total depth exclusive of the rear entry portion and porch of 57 feet. The wall heights are well proportioned, being 10 feet and 9 feet respectively, with a most commodious attic.

We invite thoughtful study of the interior arrangement; the entrance is through a central hall, with livingroom placed to the right, a reception hall and diningroom to the left. Back of the livingroom with entrance out onto the porch, which returns to the right side, is the Doctor's office with private toilet. The second floor is divided a little bit unusual as to the size of the rooms, the owner in this case taking one of the rear rooms for his own apartment, which is 17 by 24 feet, and through French windows at the rear you pass out onto a sleeping porch which runs the length of the room and is 8 feet wide. Off of the owner's chamber is a private bath.



DESIGN B 406

Geo. M. Kauffman, Architect.

Very Quiet and Home-Like

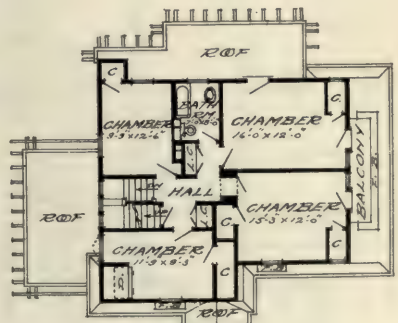
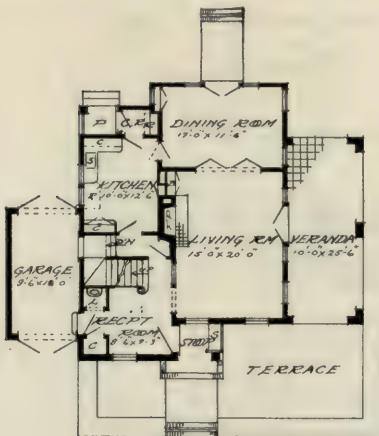
The third floor is divided into two chambers with an extra bath finished off for the use of servants, and besides this there is a large storage room.

The interior finish is of hardwood with the same for floors throughout, the standing finish being quarter sawn oak in the principal rooms; the kitchen and pantry are finished in pine. Built in a substantial manner and as above described,

such a residence would cost now about \$16,000. The elaborateness, however, of the interior finish and equipment of such a house can easily vary the cost several thousand dollars.

Design B 410.

Fifth in our series this month of interesting houses is a photo view of a moderate size home recently completed. It is a house which is quite unusual in the ex-





Bungalowcraft Co., Architects.

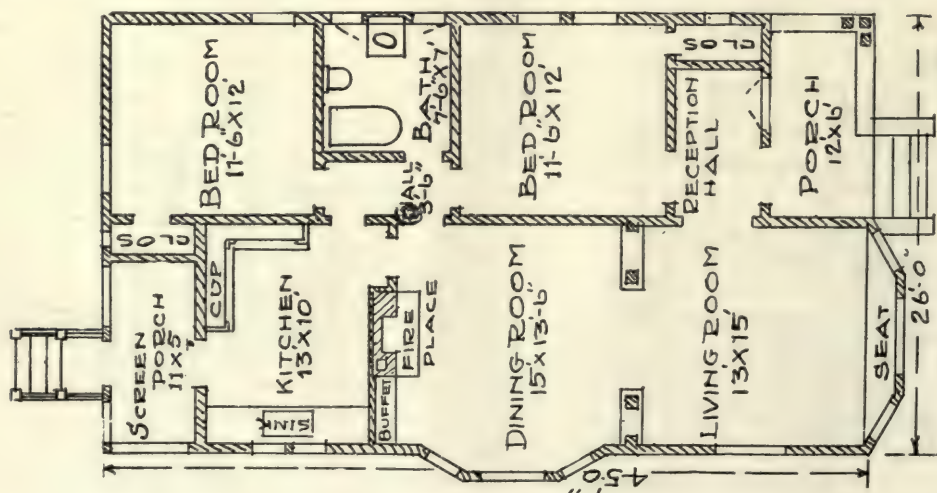
DESIGN B 407

A Cozy Five-Room Bungalow

terior treatment of walls. The construction is that of frame and is overcast with cement applied on metal lath. As completed, the appearance gives the impression of the walls not being perpendicular, the house being somewhat wider at the foundation than at the cornice. This is brought about by the building out some 12 inches on each side so as to get this flare at the base. The studding supports,

however, are perfectly straight. The detail of the design is in keeping with the architect's ideas of uniqueness in this respect. It is a house well fitted with windows and yet should be inexpensive to build, having a very plain hip roof, pitched low and with no dormers.

The foundation walls are of poured concrete, and the owner, a great admirer of cement construction, has utilized that ex-





Chas. S. Sedgwick, Architect.

DESIGN B 408

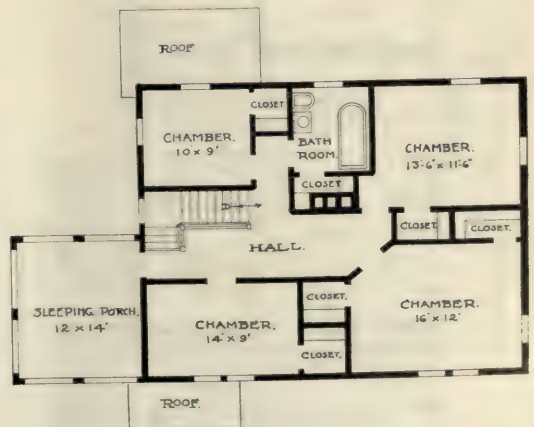
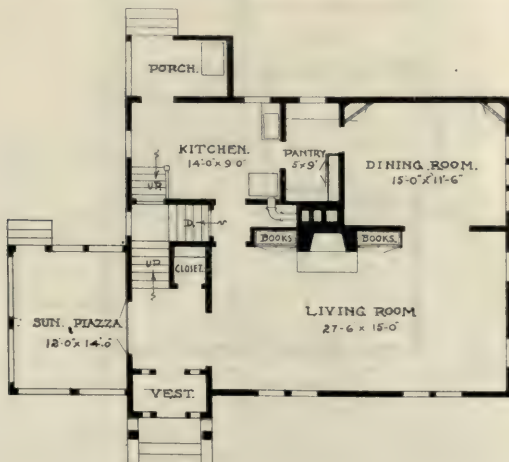
A Plain Colonial Cement House

cellent material in every way possible. There is a hot water heating plant with laundry and the usual practical division of the basement space. The interior finish is hardwood and this house built last year, in Minnesota, cost \$5,300.

Design B 411.

From time to time we have received

from the Prize Competition carried on by the "Brick Builder," in the interests of better built houses, designs for publication, and we are very glad to show this month an excellent design for a hollow tile constructed residence with a rough cast cement exterior. The roof, however, is shingled, but might better be either tile





DESIGN B 409

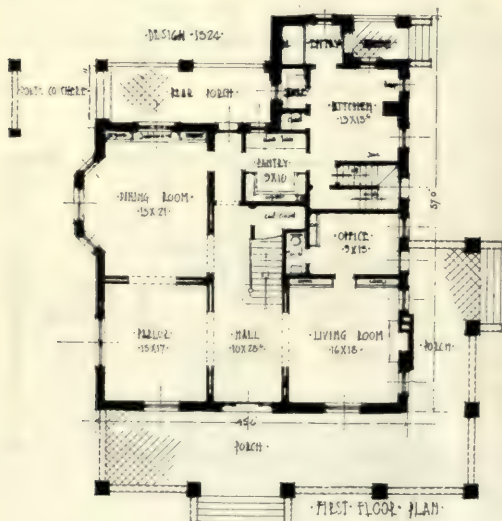
A Pretentious City Home

or cement so as to carry out the fireproof advantages more completely.

The entrance porch, it will be noted, is taken out of the right hand corner. There is a small hall with coat closet and space for lavatory in the passage between the kitchen and hall. The livingroom is across the balance of the front of the

house. This room has the added charm of an inglenook.

The diningroom is separated from the livingroom by columned opening and has entrance through French doors onto the veranda. The second floor contains five chambers of good size, each provided with closet. In addition to this there is a good





Courtesy of the Nat'l Fireproofing Co.

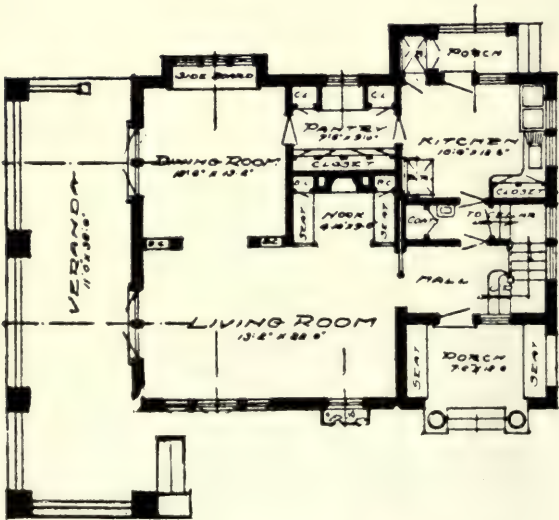
Arthur Weindorf, Architect.

DESIGN B 411

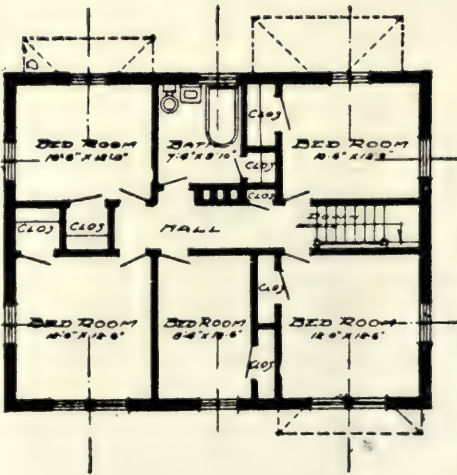
Pleasing Sketch for Fireproof House

advised by the winner in this competition, Architect Arthur Weindorf, as to what he estimates the cost of this house planned as above described, but he will be

very glad to answer any inquiries concerning the same. Additional sketches by this excellent designer we shall hope to show in the near future.



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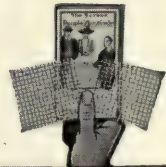
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At the Mercy of the Decorator.



HE average woman is absolutely at the mercy of the decorator. The whole of the processes of the painter and paperhanger is so mysterious to her that she has no standard by which to judge his work, nor any way of estimating his charges.

If she remembers the fact that a single roll of wall paper contains four square yards, she ought to be able to estimate roughly at least, the quantity of paper required for the walls of a room. With a plain or small patterned paper no allowance need be made for waste, but with a large design from one-fifth to one-fourth must be added to the original calculation. The decorator charges the ordinary retail price for paper, which he buys of the jobber at just one-half, and a certain sum per roll for laying, varying according to the quality of the paper, or the difficulty of laying. So far everything is perfectly simple. The most economical way of decorating a room is to have a drop ceiling in kalsomine, a picture moulding and a patterned side wall. Once you use, a border of any sort the decorator's opportunity begins and the charges for cutting and laying are multiplied. The decorator rejoices in a room with a striped side wall and a papered drop ceiling, with each section of the drop edged with a border made from the stripes in the paper below. He separates the two parts of the wall with a picture moulding and puts a second moulding at the junction of the ceiling and the side walls. All of this costs the client a pretty penny, the result not at all commensurate with the expenditure.

As a matter of fact, these elaborate arrangements are out of place in the average house. They will generally be found

to have been originated to conceal some defect in the structure of a room, or to change its apparent proportions, and not to be applicable to a room of ordinary height and size.

In a room nine feet high the wall paper should be carried straight to the ceiling line, without any sort of border. In a room higher than this, unless it is exceptionally large a drop ceiling is advisable, carried a little below the upper line of the doors, but it is just as effective in tint as in paper and far cheaper, and the only moulding needed is one at the junction of tint and paper.

When a room is much cut up with openings, the two-fifths treatment is a good one, a paper with a good deal of pattern laid for three-fifths of the wall surface, the remainder of the wall covered either with a plain paper harmonizing with the design or in tint. With this treatment the separating moulding should be heavier than the ordinary picture moulding, what is called a card rack, or even a narrow shelf. This sort of treatment is adapted to dens, breakfast rooms, or small studies, rooms just a little out of the common. It is an economical mode of using an expensive wall covering like grass cloth or toile.

Overlooking the Painter.

As the painter is paid by the day it is easier to keep track of his charges, but if you want satisfactory work you must be on your guard against the substitution of inferior materials. Benzine and fish oil are cheap, turpentine and linseed oil are dear, and the painter is not concerned for the permanence of his work. You are much more sure of your painting if you have it done by days' work, supplying the material yourself. The writer has

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sometimes found an elderly man, a good workman but not quite rapid enough to be in demand with the heads of shops, who did very satisfactory work, and even condescended to listen to suggestions as to the mixing of his paints. It is cheaper as well as more satisfactory to have paint mixed for the job, rather than to get the prepared article. The good workman will strain his paint through cheesecloth and have it about the consistency of cream. Two or three thin coats give better results than a single thicker coat, and do not really take very much more time, though it might seem as if they would.

The Value of Simplicity.

The point to be remembered in all dealings with decorators is that it is not material that costs but work, and the less of the latter the cheaper the job. Added to this the fact that elaborate decorations are an injury rather than a gain to the average house and you are in a position to oppose an unbending front to the decorator when he advises cut out borders, papered panellings and duplicated mouldings.

Washing Over Wall Paper.

Oftentimes a wall paper is in perfectly good condition and firmly fixed to the wall, but has ceased to be pleasing or to harmonize with the contents of the room. Under those circumstances a wash of color is advisable. Ordinary kalsomine is used, although the best results are to be had with some of the new hard finished preparations. Unless the color of the paper is very strong, a single coat is all that is required. The pattern of the paper may show slightly, but the effect is not disagreeable, rather pleasant in its suggestion of faint pattern. The best results are attained with a tint not greatly different from the paper. The same treatment can be applied to burlap covered walls.

The Curtains for a Bay Window.

A great many people are puzzled to know just how to curtain a bay window, especially the rather old-fashioned sort, almost circular and with five openings. The old way was to fit the separate wind-

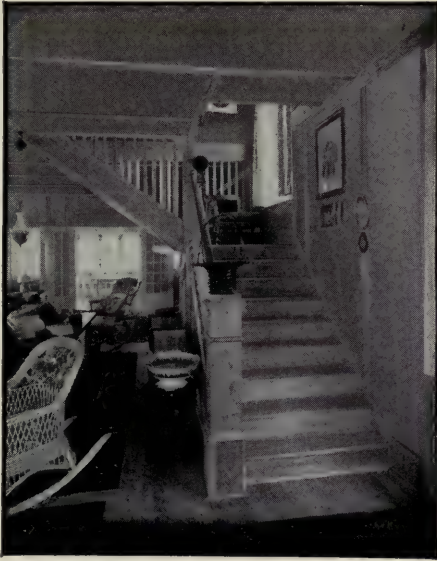
dows with shades and have long curtains tied back at either side at the opening into the body of the room, and the tradition persists. The better way is to treat the bay window as an integral part of the room, its windows just as you would ordinary single windows.

If the windows are high enough to admit of it, some sort of a valance adds greatly to the effect of thin curtains next the pane. The writer has lately seen a window of this sort with plain white scrim curtains tied back a little above the sill of the window and stopping at it, straight side curtains over them well pushed back, and a gathered valance carried across the top of all five windows. The room was a dining room with warm tan colored walls, brown woodwork and furniture and much blue china, while the over curtains were blue and white Japanese cotton crepe. The monotony of the panelling under so many windows was relieved by a low green wicker table, standing a little to one side of the bay, and holding an enormous fern.

If the bay window is a shallow one it looks well with deep cushioned seat carried around the curve, and the spaces below the seats can be utilized for book shelves. These cushions should be covered to match the side curtains, in color if not in material.

The Background for Carved Furniture.

Occasionally some one is lucky enough to have one or more pieces of heavily carved or inlaid furniture, dark in color and rich in effect. Such are tables, cabinets or seats of carved teakwood, or the Turkish furniture with its inlay of mother of pearl. Half their effect is lost when they are jumbled up with a lot of other things and placed against a wall of strong color or elaborate design. To get them at their very best try a wall of yellow, not a golden shade, but on the cowslip order, yet with plenty of color. Some of the brocade papers come in good tones of yellow and are at the same time free from the distressing shininess of some of their sort. In buying a brocade paper of any color always try to find one that suggests a silk rather than a satin brocade, or better still, a wool damask.



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The Rug for a Large Room.

Naturally, one would like a Persian, but the cost of a good Persian rug is very nearly prohibitive for most of us. Perhaps the next best thing is the manufactured rug whose inspiration is Persian. At some exclusive shops one finds the French Wilton rugs, in patterns suggesting the cashmere shawls of the early part of the nineteenth century, with their small patterns, delicate colors and insistence on the palm leaf motive. They are not cheap, except in comparison with the Persian rugs. At a lower figure and still very satisfactory are the Anglo-Persian rugs, close copies in Wilton weave of fine Persian rugs. They are good of their kind and a far better investment than cheap, modern Orientals, many of which are dyed with aniline colors. They cost much less than the much advertised Donegal rugs and are far more pleasing to the eye and agreeable to the foot. They have the advantage, owing to the fact that the Persian color schemes are considerably toned down, of harmonizing with almost any room.

When stringent economy is necessary in covering a large surface, a small patterned velvet carpet, of the sort sold for halls and stairs is a very good investment. It is always attainable in two tones of red or of olive and is an inconspicuous and inoffensive covering, and small Orientals can be laid here and there on it, at doorways and fireplace. The breadths should be sewed together, the ends hemmed and the whole laid just like any rug. A carpet lining beneath it, coming not quite to its edges, is an improvement. These two-toned carpets have the advantage over the plain velvet pile, so often recommended, of not showing dirt and foot tracks as much as they do.

The Arrangement of the Plate Rail.

The plate rail seems to be considered necessary in the modern dining room, and well managed adds much to its general effect. Most plate rails are overloaded. There is no beauty in a row of plates touching each other, all around the room. Every one may be exquisite in itself, yet lose its value in so mixed a company.

The plate rail ought not to be on a line

with the tops of the doors, but several inches below. The space above it should be practically plain, either tinted or plainly papered. Japanese grass cloth in a tone harmonizing with the lower part of the wall makes a beautiful background for porcelain, and so does burlap washed over thinly with gold.

In arranging the plates study the harmony of the various colorings. Do not put Canton cheek by jowl with Staffordshire, nor Chinese Medallion with Limoges. It is really most satisfactory to have only a few plates on the rail and have them all of the same ware. Canton Willow can be used with Delft, and is not inimical to the red and gold of Kaga, but is hopeless with the bright blue of most Japanese china. Chinese Medallion, sometimes called green India, is satisfactory in association with the delicate green of celadon or with landscape plates in low tones of gray and black, such as the Japanese painter on porcelain delights in.

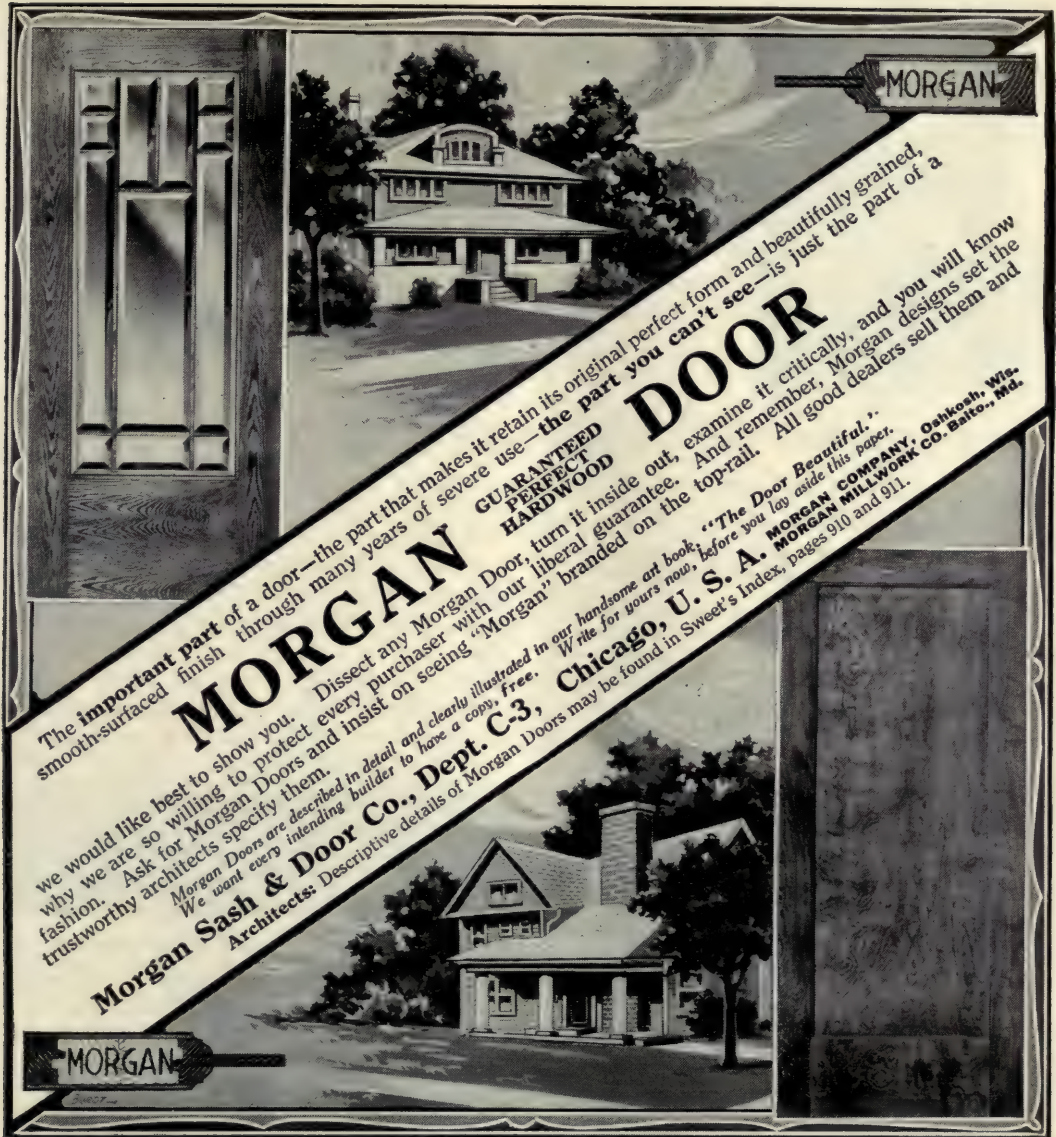
Again, alternate plates and platters. A large platter flanked by two good sized plates is quite enough for one wall space. If there are narrow spaces just big enough for a single plate, hang jugs or steins from the under side of the rail.

The average plate rail is too high. One ought to feel it possible to get at the plates for use, but how reach a plate seven or eight feet from the floor? The most successful plate rails are those in rooms with a two-fifths drop on the side walls.

The Recognition of Limitation.

The recognition of limitation is an essential to successful work of any sort. There is an old new England phrase about favoring one's weak points which expresses the matter exactly. Whenever one hears of great achievements by some one physically handicapped, one may be quite sure that that person has done what he has and as much as he has by recognizing his limitations and adjusting himself to their demands.

The commonest of all limitations is that of physical strength. Nothing seems more raw among women of the educated classes, than the possession of mere muscular strength. And this, notwithstanding a generation at least of physical cul-



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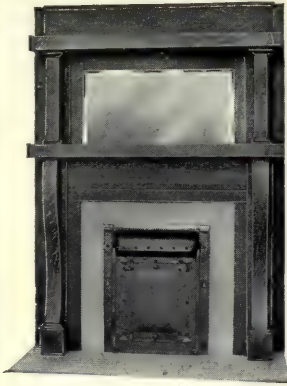
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ture. A distinguished writer on economics has pointed out the fact that muscular strength is not merely a matter of muscle, but of the fact that the muscles have been persistently exercised since childhood. The woman in the kitchen who has been doing housework in a laborious way since childhood has acquired a store of muscular endurance. She knows nothing about the prostrating fatigue which overtakes her mistress when she essays the heavier sorts of housework.

Most people can plan intelligently, if not along all lines, at least along some. Often the forethought, the adaptation of materials to ends, the nice calculations of expense that goes to the planning of the summer wardrobes of a mother and her daughters would do credit to a statesman. The same sort of aptitude is applied to the pursuit of pleasure and to social maneuvers. But all these things are mere side issues in the main business of life, the maintenance of a cheerful, comfortable and efficient home.



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Trenton Potteries' fixtures of Solid Porcelain and Vitreous China in your bathroom give to that room the touch of refinement that fine China and Cut Glass do in your dining room.

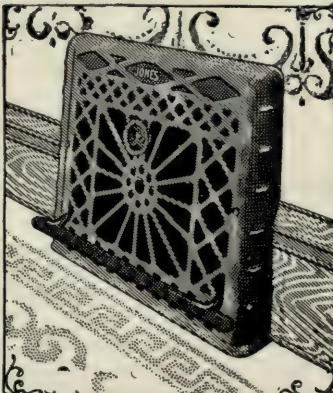
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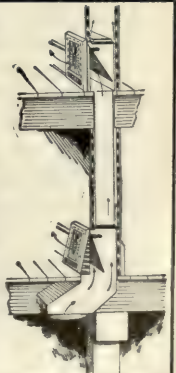
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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

* Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Altering An Old Home.

A. R. K.—“I expect to remodel my home. I am sending you rough sketch and would value your advice about numerous things. The house faces the south. Do you think the two large windows would light the living room sufficiently or would you use leaded art glass window on the opposite side of fireplace? I have the leaded window. The hall, living room, dining room and floors are finished in oak stained light brown. Ceiling of living room will be beamed. Please suggest color of tile or brick (which would you use?) for living room fireplace. Hall rug is green with touch of dim old rose. Dining room rug is green, ivory and some red, both Wiltons. I am changing the rooms by taking out a partition between the dining room and little living room, and building more on dining room back, in this way making a larger living room. Do you think the plan a good one? Some discourage me, as the house has only been built five years and is nicely finished, floors and all, and they think it will ruin my floors and woodwork. Your answers to questions on interior decoration in the magazine are so interesting and quite a help to the readers.”

Ans.—We are interested in your proposed alterations and think they will add fifty per cent to the selling value of your house, to say nothing of your own enjoyment. As we understand it, you are throwing out the big bay in west wall of dining room and moving back the partition between. We made several changes recently in a house built only two years, with beautiful woodwork. The woodwork was not injured at all and the floors only had to be rewaxed. Of course, the workmen were good ones.

In regard to the windows, we think

that a half window each side of the fireplace would be a good architectural feature; but we should not care for an art glass window on one side with a full sized one on the other. We think you already have too much art glass and in dining room would use it only over buffet. We should hang thin draperies of some soft red silk or Sun-dour, at the sides and you could draw these partly across when you wished. It is rather a pity that the green and ivory rug must be used in a northeast room, but we will warm it up by a frieze in soft greens and dull coppery reds, with a neutral wall below. Ivory ceiling. We would use a paper in blended greens and greys on living room wall, with two 9x12 Saxony rugs in plain shaded greens instead of the large one you suggest. When you get beyond 9x12 the rugs cost much more in proportion and the two 9x12 would cost less than one 12x15 and a small one each side, besides looking better and being easier to handle.

We prefer brick for fireplace facing and would use a soft pretty grey. Since you have a good mahogany davenport we would not get a round table, but a long one nearly as long as the davenport, and place them in front of fireplace as shown on diagram, placing your reading lamp there. We hope this is the only piece done in leather and think the other mahogany chairs should have tapestry upholstery. The addition of two brown wicker chairs cushioned in green velour or corduroy would be very good.

Changes in Old House.

G. W. M.—“Will you please answer these questions: (1) The wood finish in our dining room is natural cherry—a reddish brown. My dining room furniture—table, buffet, chairs, etc.—are of



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WALLS—S W Flat-Tone, Bright Sage

WOODWORK—S W Handcraft Stain, Bog Oak
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SHERWIN - WILLIAMS PAINTS & VARNISHES



Address all inquiries to The Sherwin-Williams Co., Decorative Department, 629 Canal Road, Cleveland, O.

dark oak. I do not like to destroy the cherry effect, as it is a rare and valuable wood now, and I do not wish to sell my furniture at a sacrifice. How can I use the two kinds of wood in harmony? What color of wall would you suggest—the room being lighted from the north and west, but is not a dark room? (2) What is the latest and best method of finishing a wide opening between hall and living room—the hall finished in oak and the living room in the cherry? Are pillars used still? (3) We wish to put new windows in the front of the house—in the living room, hall and bed rooms above. What would you suggest that we will not soon tire of, etc.?"

Ans.—We should advise a wall paper in the dining room in accordant tones with the cherry woodwork. The wall and the woodwork being then in harmony, the dark oak furniture would then not be so bad, as if still a third element were introduced by a contrasting wall treatment. We do not think the dark oak could be brought to a cherry tone, but you may eventually exchange it for dark mahogany, which would give you a fine accordant with the cherry. We have in mind some papers in certain terra cotta shades which would tone in with the cherry with excellent effect. If there is a plate shelf, there is a tapestry which combines terra cotta with dull greyish blues and greens which could be used either above or below, with remaining wall plain. Columned openings are still used, but such a treatment here would not be advisable on account of the cherry finish in living room. We should prefer a wide 7 ft. plain cased opening, the casings of the oak hall and we would use portieres, well pushed back. Something would depend on the furniture of living room which you do not mention.

Regarding new windows, a group of five mullioned windows in living room front with group of three above, the center window over the center window below, would give interest to your house. There could be a double mullioned window over hall. The character of the sash would be governed by the sash on the balance of the house. If there are no small panes anywhere else, you cannot well use them in front. Your best way

would be to send a photo of your house to our architectural department and get a drawing of front openings.

Concerning Plate Rails.

I. A. C.—"I note your offer to answer any questions relative to interior decorations. I enclose herewith stamped envelope, please let me know whether or not it is best to use a plate rail in a dining room. I have read somewhere that in the modern homes plate rails were not being used."

Ans.—Regarding use of plate rail in dining room, it is a matter of choice entirely. Plate rails offer more opportunity for decorative effects and will always be used more or less. However, they are not so universal as several years ago and it is probably true that in the more elegant and formal new homes they are dispensed with.

A Problem in Colors.

I. W. C.—"I enclose you herewith a very rough sketch of a seven-room house and wish to get an idea from you as to how to decorate and furnish same with little expense as possible. How would you suggest furnishing sitting room and parlor, both being papered tan with woodwork stained mahogany finish? How would you treat floors in these two rooms? How would you treat floors and woodwork in dining room, it being papered with scenic paper, green predominating? Our dining room furniture being golden oak, how would you trim windows in this room? Hall papered with green and gilt paper, how would you treat woodwork? What kind of a stair carpet would you suggest? The bed rooms are over sitting room, dining room and parlor. We have one oak bed room suite, and one blue enameled bed. What would you suggest buying to furnish these three rooms and fill in with this amount of furniture? What kind of draperies would you use on windows in each of these rooms, also what color of paper would you suggest and how would you treat floors and woodwork? The house has yellow pine finish throughout."

Ans.—It is a pity you have not reversed your wall coloring and put the green paper instead of the tan on the

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Have you appropriate fixtures in your Hall or
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if wisely selected, will harmonize with the surroundings and blend with the furnishings in color, tone and style.

We are the acknowledged authority on hand-wrought unusual fixtures.
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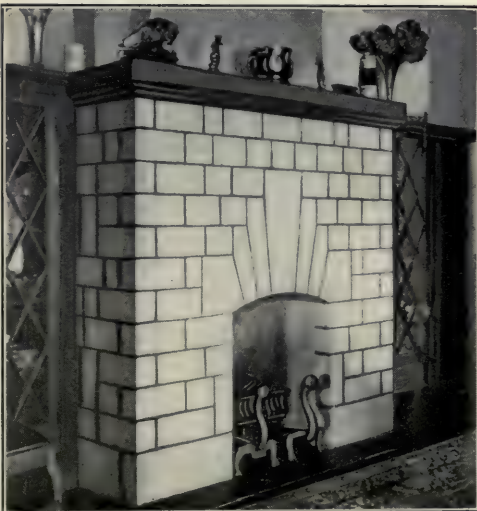
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PHILADELPHIA, U. S. A.

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Ask your dealer or write us.

PURITAN CORDAGE MILLS

Louisville, Kentucky

ANSWERS TO QUESTIONS—Continued

southeast rooms and the tan on the north room and hall. As the woodwork is mahogany stained in parlor the furniture best be partly at least of birch mahogany finish. One or two chairs of wicker stained brown mahogany could be mixed in and the sitting room entirely furnished in wicker and bentwood; see KEITH'S MAGAZINE for August. If the floors are of the yellow pine we would give them a coat of mission oak wood dye, then a coat of under lac, or similar finish, then a floor varnish or wax. All the lower floors to be treated alike. On the dining room woodwork we would use No. 131 Brown Weathered. We hope there is some yellow in your scenic paper. Emphasize it all you can with dull yellow ceiling tint and curtains of yellow Sun-Fast at the windows. As for the hall, the same brown stain for woodwork and stair carpet of green and brown. In the parlor use an all over lace net for curtains; sitting room plain ecru scrim.

Paint the woodwork in southeast room light greenish grey; use a chintz paper having grey ground with flowers in dull greens, blue and red and put the oak suite in there. Paint all the other woodwork upstairs white. Study the painting announcements to be found in every issue of KEITH'S. Put the blue bed in southwest room and get a white dresser and white wicker chair to go with it, also small wicker table. Use two small blue and white rag rugs. Curtains of white scrim with bordered edge of blue flowers.

A Homebuilder's Troubles.

J. E. H.—“I have just remodeled my home and took especial pride in the dining room I was to have—but, alas! an irresponsible painter and decorator has blasted all my hopes. In despair I turn to you for advice. My dining room is 21 ft. wide by 32 ft. long (was formerly parlor and dining room, now thrown in one), has large, beautiful open fireplace, 4 ft. wide (as wood is plentiful here I did not have to economize on that line), has double casement windows on each side of fireplace opening on west side, one single window on east side and two doors opening into hall. It has three floors. No. 1 is just plain eight-inch boards, then a layer of building paper, then No. 2 a

tongue and grooved pine floor, which was formerly the top floor. No. 3 now is top floor of oak, $\frac{3}{4}$ -inch thick. The contractor had the floor first scraped and then sandpapered until it was as slick as glass. The painter then took charge and put a stain on which seemed all right, but he said that was only a filler and so then put on another coat, which made it quite dark (almost like walnut), then he put two inexperienced men on it with a mixture of boiled linseed oil and vinegar (half and half), and they simply laid it on in “puddles” until my common sense told me that was wrong and I drew the painter's attention to it. He says they put it on too thick—at any rate the floor is sticky and the chairs even stick, and I can't put a rug down that it does not pull off all the nap. This dining room is furnished in mahogany furniture and the woodwork (even the beams overhead) are all stained mahogany. Can this floor be remedied? If so, how? I live in the country and do not wish a polished floor that will scratch easily or show other marks, as we have poor servants, who are careless, and this large fireplace will have to have fires in winter, and careless negro men will be the ones to do this, but I wish a floor that will not be the least bit sticky. Please help me if you can.”

Ans.—You have our sincere sympathy. Such treatment of an unusually fine floor is an outrage. We regret you did not in the outset equip yourself with literature from some of the excellent floor finish manufacturers advertising in KEITH'S MAGAZINE, that you might have been on guard against incompetent workmen. We advise you to send for such booklets even now, as they are a good thing to refer to.

From your statement of present conditions, we see nothing for it but to remove the present coating, we cannot call them a finish, as much as possible with Electro-Solvo. Boiled linseed oil and vinegar is not fit even for a kitchen; such a thing is unheard of with our finishers. It is possible a liberal application of benzine might remove this sticky compound down to the stain used by the first painter, and if so the floor could then be refinished without the use of the Electro-Solvo.



IN THE LIVING ROOM

WILD'S PARQUET INLAID LINOLEUM

Brings an air of refinement, repose and perfect cleanliness to the comfort haven of the home. There is no danger to young or old from slipping as on hardwood floors; no noise; no need of costly refinishing; and no annual upheaval at Spring cleaning time as with carpets.

WILD'S PARQUET INLAID LINOLEUM is noiseless, elastic and in appearance closely resembles wood parquet. It is perfectly sanitary, the permanent presence of linseed oil being actually destructive of germ life. It has a safe stepping surface; is easily cleaned with soap and water; is less expensive than hardwood; never requires refinishing and will wear for years as the patterns are *inlaid*, the colors being the same right through. It is suitable also for other rooms, likewise for offices, public buildings, etc.

Sold by dealers in high grade linoleum. The trade mark on the back is your guide and guarantee.

Send for folder "P" showing the 26 patterns reproduced in colors, and list of dealers in your locality handling the line.

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The Window Chute

A Real Window — A Perfect Coal Chute

Useful 364 days
in the year for
light and one day
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A Burglar-Proof, Air-Tight Window which conforms with architectural lines. Looks best and is best. Write for booklet giving full description.

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"Holland Furnaces Make Warm Friends"



Don't Eat Smoke!

—Because your fireplace won't draw. COLONIAL FIREPLACES always send the smoke up the chimney and the heat into the room.

The secret of their success is the patented Colonial Head, Throat and Damper and the full-sized detail working plans. These insure perfect construction *always*.

Any competent mason can put up a COLONIAL FIREPLACE because it is shipped with all molded brick ground and full details for installation.

COLONIAL FIREPLACES are *economical* both in labor saved when installed and in consumption of fuel. Our booklet, "The Home and the Fireplace" shows a few of our many designs. Send for it to

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Make Your Own Gas

THE pleasure of living in the country or small town is greatly enhanced by a few city conveniences, the most necessary and comfort giving of which is a Satisfactory Gas Supply.

Gas to Light with.

Gas to Cook with.

Gas for Laundry purposes:

Gas to heat water for the bath and other uses.

Gas to operate a gas engine for pumping and other purposes.

You can have all these conveniences cheaply and automatically by installing the

DETROIT Combination
Gas Machine
FOR ILLUMINATING AND COOKING

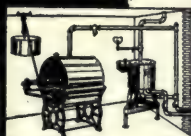
Will not increase your insurance rates. On the market over 40 years. More than 15,000 in use in Residences, Stores, Factories, Churches, Schools, Colleges, Hospitals. It will Pay You to investigate. Write us today—NOW—a post-card.

DETROIT
HEATING & LIGHTING CO.

362 Wight Street

Detroit, Michigan

Attractive Proposition to Plumbers



Carburettor under ground

Machine in basement

ANSWERS TO QUESTIONS—Continued

We fear the linseed oil has still further darkened the wood, as that is the tendency of oil. Get the best workman you can and stay by him while he tries the benzine. We do not object to the walnut color if not too dark, even to use with mahogany, but it shows dust and marks more readily than a lighter finish. After removing the sticky compound, go over the floor again with a cloth saturated in naphtha or benzine, so as to be sure it is clean, then in an hour or two apply a coat of Prepared Wax. We think this is the best finish for you, even with the hard usage you anticipate for the floor, as if well rubbed in, it will not show scratches nearly as much as varnish. You should have two coats of the wax put on, rubbing well each coat with either a weighted brush or a block of wood wrapped around with old carpet. Then keep a can of wax on hand to rub over any worn places as they appear.

An important point in using all finishes is that they should be applied thin with successive coats, for good work.

Stanley's Ball Bearing BUTTS

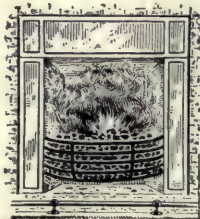
INSURE PERFECTLY HUNG DOORS

Friction is eliminated by the steel bearings, and the door swings smoothly and softly without creaking or binding. These butts have

NON-RISING PINS

which will not work out of the joint. Write for artistic and instructive booklet "Properly Hung Doors."

Department "T"
THE STANLEY WORKS
NEW BRITAIN, CONN.



Many styles of grate and mantels to choose from.

This Grate Does Double Duty

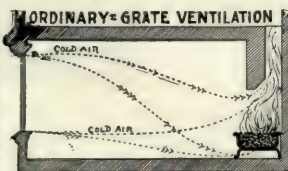
It Combines Perfect Ventilation with Economical Heating

and, with the same amount of fuel, burning any kind, will pay for itself in three years in increased heating efficiency. Heats house in Fall or Spring better than a furnace and takes about half the fuel.

The Jackson Ventilating Grate

is as beautiful as the most artistic ordinary grate and affords the same sense of coziness and cheer; but it ventilates, not dangerously, with air drawn across the room from door and window cracks, cold, but healthfully with air drawn in from outside thru a fresh air duct, circulated around the fire and sent into the room thru the register over the arch, *fresh but warmed*. Gain comfort and save money by investigating. Any mason can set it up from our *Complete Plans Furnished Free*.

Send for Free Catalog of our wood mantels, and irons, and all kinds of fire-place fixtures, as well as ventilating grates, with explanations, illustrations, full information and prices; also reference to users in your region.



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EDWIN A. JACKSON & BRO., Manufacturers
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WALL and CEILING HINTS

by Experienced Users

No. 2

Well Suited to Large Interiors

"I enclose photo of Christian Science Church of this city, finished throughout with Beaver Board, and I want to say we are very much pleased with the goods and appearance."

M. T. Coats, Rutland, Vt.

Beaver Board is equally attractive in smaller rooms, as shown by the picture below, of the minister's study in the same church.

BEAVER BOARD

Write for "Beaver Board and its Uses," a free book, handsomely illustrated. Painted sample sent with book.

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Canada: 316 Wall St., Beaverdale, Ottawa
Great Britain: 4 Southampton Row, London, W.C.



Minister's study, Christian Science Church, Rutland, Vt.



Go into the most magnificent and beautiful homes and notice the wall finishes—solid colors, soft tints, dull flat shades. Then notice how effectively the hangings—pictures, draperies, ornaments,—stand out against such backgrounds.

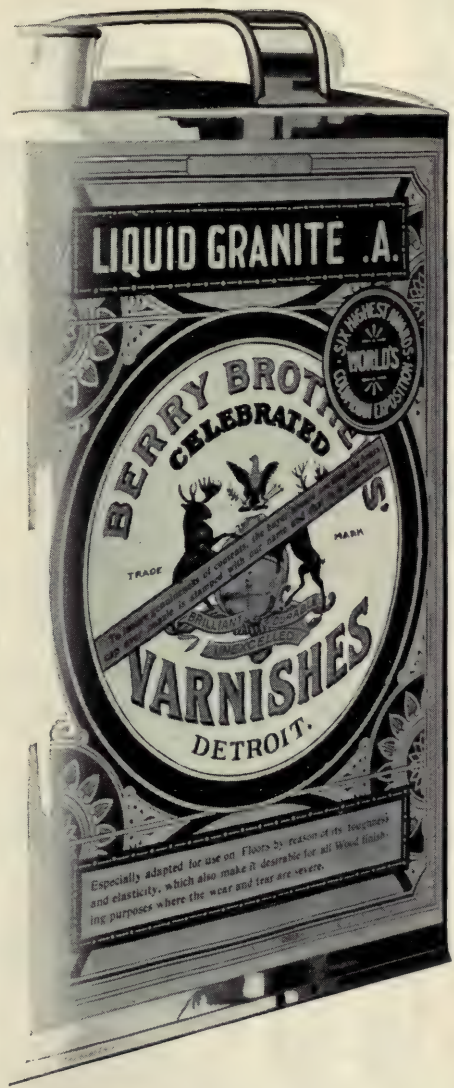
Johnston's Dull Kote Paint

is the favorite wall finish because it produces the most effective, artistic background known. More than this, the surface is hard and durable—can be washed like tile and is always *fresh* and *clean*. Then it's *absolutely sanitary*, it can't harbor disease germs like wall paper and does not crack, flake or peel like kalsomines.

Our booklet, "The Problem of the Wall," contains all shades and full information. It's free, from your dealer or

The R. F. Johnston Paint Co.

Pearl and Main Sts., Cincinnati, O.



GET this trade-mark label and you get the best varnish the world offers.


THE time to make sure of good varnishing results in your new home is when the specifications are being written. See that Berry Brothers Architectural Varnishes are specified throughout, for you **CAN** afford to use the best varnish.

Send for Free Booklet—"Choosing Your Varnish Maker."

BERRY BROTHERS, DETROIT



Training the Children.

 HE domestic problem is ever before us and the normal attitude of the American woman seems to be a wild looking hither and thither for possible solutions. Sometimes the boarding house or the hotel is the one adopted and the gradual decay of the family life ensues. More often the mother of the family vibrates between long periods of drudgery and short intervals of recuperation. There has been a wonderful advance in the last twenty years in the invention and manufacture of labor saving machines of various sorts, but it is questionable how far they have benefited the average family, which lives on a close margin of expense. This is especially the case with reference to the various electrical appliances, which are very expensive, both in first cost and in maintenance. Nor has the average woman the mechanical turn which enables her to operate a more or less complicated machine with ease. It would seem as if for the majority the old fashioned methods would be likely to persist for some time longer.

That being the case, how about applying the principle of the division of labor and including the children in the labors of the house?

It would be ludicrous, if it were not tragic, the drone-like attitude of most children to the domestic economy. It is natural in the children of the rich, though not exactly commendable, but in no other country in the world are children of the middle class so helpless as in servantless America, and their elders appear to consider the situation perfectly normal.

Among the poor, it is true, the situation is reversed and too often the little girl drudges out of school hours and on Saturdays, while her slovenly mother lounges at the door gossiping. Knowing the conditions of most homes, one is inclined to question the value of the vaunted industrial training of our public school. The child of the poor has neither the materials nor the appliances with which to put her training into practice, while opportunity is lacking to her better placed class mates.

The unselfishness of mothers is at the root of the matter. They want their girls to have the best time possible, and they conceive of a good time as unrelieved junketing while, as a matter of fact, Edith will enjoy her picnic none the less for putting up her own sandwiches, and the joy of a matinee will not be seriously dimmed, if at all, by a morning of dusting and bed making. But do women realize the questionable wisdom of allowing girls to grow up with such a dependence upon being amused? A youth of incessant pleasure and distraction insures a middle age of ennui. Is there anything more pathetic than the woman past youth, who has no serious interests, who spends her time in the pursuit of enjoyment? The social circles of cities are full of such, drifting from purposeless youth to bored old age, when the desire for pleasure shall have outlived its possibility. Recreation has its uses, as its etymology indicates, but it is accessory to life, not life itself.

However, we are less concerned with tendency than with actuality. The systematic employment of the children in the lighter forms of housework would go

HOT-WATER HEATED BY THE ANDREWS SYSTEM



WE SAVED
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\$160⁰⁰
A Doctor
Says

BOISE, IDAHO, Jan. 14, 1910.

ANDREWS HEATING CO.

My neighbor says it requires 1½ hour's hard firing to heat his radiators. My radiators get hot in twenty-five minutes. He uses another make. Our houses are the same size. He used 40% more coal. I put my Andrews plant in myself, working evenings, and saved more than \$200. We are more than satisfied.

Very truly yours, L. C. BOWERS, M. D.

The Andrews Steel Boiler Is The Most Efficient and Durable Made

There can be no doubt in anyone's mind of the extra efficiency of Andrews Steel Boilers, if they are given the least study. Being made of plate steel and having nearly double the heating surface of any boilers made, they heat up very quickly on small amount of fuel of any grade. The flues are easily accessible and can be cleaned thoroughly in a few minutes. The firepot and combustion chamber are large, the grate is of the latest rocking and dumping pattern and the entire design is aimed at utmost efficiency.

360 Days Free Trial Guaranteed by Bond

The Andrews Systems have been sold for over thirteen years and today they are giving excellent satisfaction in over 700 cities and towns scattered over the country. Doctors, lawyers, engineers, and men in all lines of business have profited by our method of selling cut-to-fit, ready to erect heating plants. No other manufacturer has the faith in his product to sell on a 360-day trial basis and guarantee it by a bond.

Big 72-Page Heating Book—FREE

This book of 72 large pages is full of practical knowledge on the best heating methods. Its illustrations and text afford a broad education in the problems of heating and everyone interested should write for it whether they contemplate buying an Andrews System or not. It also describes other lines for modernizing the home,

such as Sewage Disposal without sewer, Thermostats, Air-Pressure Water Supply, Gasoline-Gas Lighting Systems, etc. In writing, please send names of two parties interested in heating.

\$20 Thermostat FREE

As a special hurry-up offer to Keith's Magazine readers we will give free one of our famous Hired Man Thermostats to each person answering this ad within 30 days and buying an Andrews System of any size during 1913. This heat regulator takes complete charge of the dampers of your heater, maintaining the exact temperature you desire in your rooms day or night. It saves fuel as well as doing away with the care, worry and work of tending the dampers. Regular price \$20—Clock \$5 extra.



Regurgitating Safety Valve and Group System of Piping

The Andrews Regurgitating Safety Valve is a wonderful little device which enables the use of smaller radiators and piping, at the same time maintains the full efficiency. This makes a saving in the cost of the plant as well as a decrease in the floor space needed by radiators for other systems. Our group systems of piping gives independent circulation in practically every radiator, thus doing away with one radiator decreasing the efficiency of others on the same lead. All rooms are heated evenly.

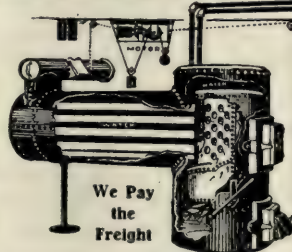
Most Economical and Gives Greatest Comfort

The first cost of a plant is not the item on which choice should be based. Fuel economy and durability as well as ease of operation and general comfort obtained are the essential items and these are provided in the fullest measure by the Andrews Hot Water Systems.

Easily Installed in New Or
Old Houses

Get Our FREE Estimate On Your Next Heating Job

No matter what your problem of heating may be write for our free estimate on a plant to meet your exact requirements. Send us your plans or rough diagram of your building showing sizes of each floor, location of windows, height of ceilings, etc., and our engineers will give you the cost of a complete system all cut to fit, ready to screw together and delivered at your nearest station, freight prepaid.



We Pay
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Saves
1/3
Fuel

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ANDREWS HEATING COMPANY

1325 Heating Building

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MINNEAPOLIS, MINN.

far to ease the average household routine. Moreover, it would gratify the instinct, possessed by almost all children, for some sort of manual activity, while it would be an invaluable training for their own domestic life when heads of houses themselves. No woman is an efficient mistress of servants who does not know how to do things herself.

Whether it is desirable to pay children for their assistance in the work of the house is another matter, and must be regulated by circumstances. Some children are naturally parsimonious, and any approach to a mercantile attitude increases their tendency. On the other hand, a generous child learns a needed lesson when work and reward are accurately adjusted. Considering the matter in the abstract, it would seem as if the solidarity of the family were best promoted by regarding the services of the child as his proper contribution to the maintenance of the family life. This way of looking at the matter tends to increase his sense of responsibility, and to impress upon him the fact of his dependence upon others and of their dependence upon him, a lesson which cannot be learned too early.

Whatever the conditions which regulate it, the child's share in the work of the house should begin at an early age, and his work should be carefully planned and definitely laid out. A child may be useful, but he has little initiative, and he must have his thinking done for him. It is often easier to do a thing than to get it done, but that proves nothing. No asset is so valuable in after life as the early training of hand and eye, nothing so great a handicap as its lack. If in the giving of that training the domestic machine can be eased, the gain is a double one.

The Resources of the Feed Store.

In many places it is almost impossible to get anything in the way of cereals except the ordinary package goods. Try the feed store. There you will find coarse and fine oatmeal by the pound, as also several varieties of corn meal, rye meal and graham flour, all of which are sold for feed. The unbolted corn meal at two

cents a pound is, from a hygienic point of view, much better than the bolted sorts, and quite as palatable. Even when one's grocer carries all these things, his demand for them is so small that they are not apt to be fresh, and some of them he does not carry at all in summer.

An exchange advises sifting coarse oatmeal before using it, to free it from the adhering flour. The flour can be used in the same way as one would graham or whole wheat.

Palatable Coarse Breads.

Many people who recognize the value of the various coarse flour breads do not find them exactly palatable. The reason is that they are seldom quite sweet enough. When the rule calls for molasses and sour milk, it is well to add a couple of tablespoonsful of sugar. Additional molasses is apt to disturb the proper balance of acid and alkali. When the sweetening is sugar, increase the amount by a third.

A pleasant variation of almost any plain cake or simple pudding is to substitute rolled oats for the flour, increasing the amount of sugar slightly, and flavoring with grated lemon peel.

A Cheap Washing Machine.

As has been remarked before, most of the new appliances are expensive. It is pleasant to chronicle the advent of one which costs but little and is really efficient. It is a cone of heavy tin fitted with an arrangement of perforated tubes and attached to a handle. The clothes to be washed are immersed in a tub of hot suds, as near boiling as possible, and the washer is moved up and down over the entire surface for a period of time varying from three minutes and a half to ten, according to the temperature of the water. The same process carried on for a minute or two in another tub of clear water rinses and blues. The dirt is literally sucked out of the clothes. No boiling is required and they are beautifully clean. Almost no physical strength is required, and on particular skill. It is admirable for washing blankets, and can be used with gasoline for cleansing. The cost is \$3.50, and the writer speaks of its merits from personal experience.



Set Six Screws— Save Furniture Dollars!

It takes six minutes to drive these six screws, and the saving is \$13.25. Now if your time is worth more than \$2.21 a minute, don't read any further.

This advertisement is for those who want high grade furniture at rock-bottom prices and approve a selling plan that actually saves big money.

Over 30,000 American Homes

buy Come-Pack Furniture for these substantial reasons. Here is an example of Come-Pack economy.

This handsome table is Quarter-Sawn White Oak, with rich, deep, natural markings; honestly made; beautifully finished to your order. Height, 30 inches; top, 44 x 28 inches; legs, 2½ inches square. Two drawers; choice of Old Brass or Wood Knobs. It comes to you in four sections, packed in a compact crate, shipped at knock-down rates.

Our price, \$11.75. With a screw-driver and six minutes you have a table that would ordinarily sell for \$25!

Free Catalog Shows 400 Pieces

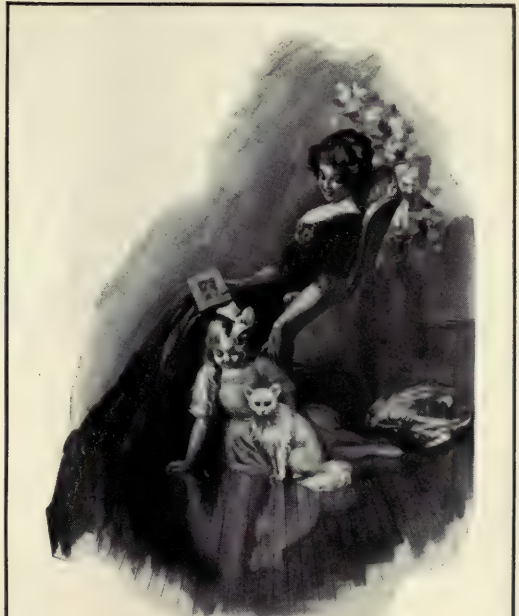
for living, dining or bedroom. Color plates show the exquisite finish and upholstery. Factory prices. Write for it today and we will send it to you by return mail. (11)

Come-Pack Furniture Co., 356 Fernwood Ave., Toledo, O.



No 300 Library Table
Come-Pack Price \$11.75
Shipping weight 150 lbs.

Sold on a Year's Trial



Oak Flooring

Beautiful :- Economical :- Durable

Attracts your attention immediately
And it holds your admiration permanently

- ❑ OWNERS and BUILDERS find it a clinching argument to say "It's Floored with OAK FLOORING." It means that the tenant or buyer will be glad to pay 10 to 15 per cent more. In color, it is rich and cheerful, and imparts an air of refinement and elegance to a home. It is the modern flooring.
- ❑ OAK FLOORING ¾" thickness by 1½" or 2" face can be laid over old floors in old homes, or over cheap sub-floors in new homes at a very low cost. It is cheaper than carpets or Pine Flooring.
- ❑ OAK FLOORING laid forty years ago in public buildings, after very hard service, is still in good condition. For durability, OAK is the best.
- ❑ There is a solid satisfaction and lasting pleasure in the substantial and dignified appearance of OAK FLOORING.
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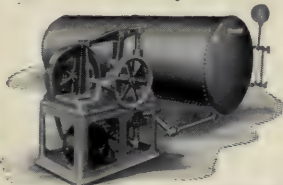
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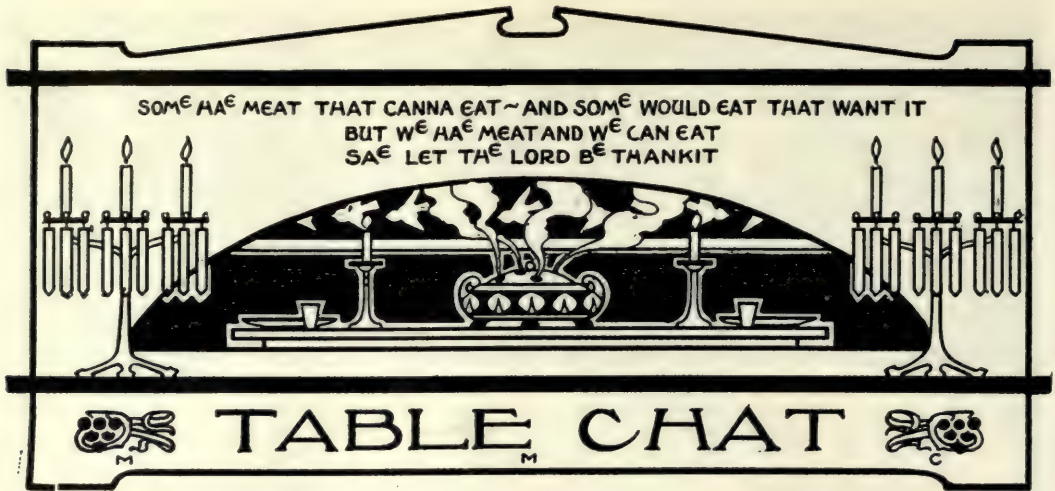
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My German butcher is authority for the statement that veal is the proper *pièce de résistance* for the Easter dinner.

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TABLE CHAT—Continued

the sweetbreads may be chopped fine, with half the quantity of cooked mushrooms, mixed with a very thick cream sauce, made with double the usual quantity of flour, cooled and shaped into cutlets, crumbed and fried in deep fat.

A Savory Roast.

When veal is to be the main dish, get the rump cut of the loin, the end with the kidney. Have the bone taken out to make a pocket for dressing. Stuff

side down and cover it with waxed paper, and make mounds of the meringue about four inches across. Set the pan in the oven, a very slow one, and let it stay until the meringues are an even light brown. At serving time, run a knife blade under each and transfer it to a plate. Scoop out the soft centre and fill the cavity with ice cream. For chocolate cream flavor the meringue with vanilla, for raspberry or strawberry with bitter almond, for pistache with coffee



A BEAUTIFUL AND SERVICEABLE TEA SET.

with breadcrumbs which have been browned in bacon or pork fat, seasoned highly with parsley, a little sage and thyme. Cover the top of the roast with very thin slices of fat salt pork, fastened on with toothpicks. Serve it on a platter with a border of little heaps of spinach alternating with thin slices of large fried sausages, and with either new potatoes in cream, or with spaghetti cooked with cheese.

Meringue Shells for Ice Cream.

A pretty way of serving ice cream is in meringue shells. The whites of four eggs are to be beaten till very stiff, then four tablespoonsful of sugar and flavoring added, and the mixture whipped again. Turn a large dripping pan up-

extract, and vice versa. The scooped out centres can be utilized for a cake filling. If ice cream is served in this way, less is required.

Hot Chocolate Sauce.

The hot chocolate sauce so much used for ice cream is useful for any of the cake puddings, or for blanc mange. Its commonest fault is excessive sweetness, and it is better to make it of the bitter confectioner's chocolate, which can be bought of bakers. A quarter of a cupful of sugar is quite enough for a half pint of sauce. Vanilla is an improvement, and arrowroot is the best thickening. Nor should a pinch of salt be forgotten.

An unusual dessert consists of a plain

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TABLE CHAT—Continued

blanc mange, made with gelatin, flavored with bitter almond. This is served with a sauce made by thickening a mixture of equal parts of black coffee and cream with arrowroot, adding a tablespoonful of brandy. The blanc mange should be sweetened, and the sauce may be either hot or cold.

Fashions in Silver.

There is a tendency to revive all the old patterns in table silver, and the very elaborate designs so popular a few years ago, are quite out of the running. Formerly only solid silver was made in the simpler patterns, but now it is quite possible to get absolutely plain pieces in quadruple plate. The most desirable tea services have ebony handles, and are simply fluted. Much of the small silver is absolutely plain, except for a beading at the edge. These simple designs, aside from their dignity and refinement, have substantial advantages in being easily cleaned.

And apropos of plated small silver, there is one make, in which the points of greatest wear, like the bowls of the spoons, are reinforced with a bit of solid silver, so that no vicissitude brings the base into view.

EDITOR'S NOTE.—We are indebted to the International Silver Co. for illustrations used in this department.

Tea Cloth Ideas.

Often an effective afternoon tea cloth can be improvised from some survival of a wardrobe of long ago. Time was when wide, fine, linen laces were much in vogue, as a trimming for linen or foulard gowns. A circle of linen, large enough to hang over the edge of a round tea table about four inches, may be edged with one of these wide laces. If there is an insertion to match the lace, a square or circle can be outlined with it, on the linen, the fabric cut away beneath it.

Many people have beautifully woven homespun towels, of generous width. Squared, finished at the edge with a handsome scallop, with a large and elaborate monogram in the centre of one side, such a towel is an effective and interesting tea cloth.

Something quite new at a smart New York shop is a tea cloth of heavy linen, divided into four inch squares by lines of hemstitching. At each point where the lines intersect, is set one of the tiny, cut out squares, with buttonholed edges and bars, used in Italian linen work. The edge of the original was finished with a line of buttonhole stitch, with picots at regular intervals.

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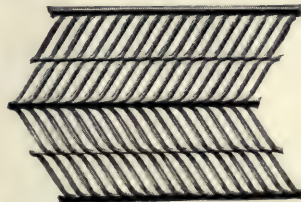


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When the concrete is thoroughly dry and seasoned, says the "*American Roofer*," two coats of concrete floor dressing should be applied. Making a cement mortar veneer of one-half inch thickness, and applying two coats liquid cement upon the surface, after the same is thoroughly dry, produces a sanitary and light radiating basement.

Concrete floors having exceedingly fine, close texture, floated to a dense surface, which carry at times a semi-gloss finish, should be treated as follows: The surface should be gone over lightly with a carborundum rubbing brick in order to establish a bonding surface that will enable the concrete floor dressing to knit close to the floor structure and practically become integral with it. This will prevent scalping and peeling of the floor dressing. The floors should, of course, be cleaned, thoroughly dry, and well seasoned before the first or priming coat of concrete floor dressing is applied. Transparent floor dressing of any color desired may be used. It should be applied by means of a suitable brush, preferably a flat 5- or 6-inch white bristle brush. The dressing should be worked well into the pores of the concrete, spreading it well over the floor surface to develop a thin film. The temperature conditions during the periods of application and drying should not be under 70 degrees Fahren-

heit to insure the best results. The second coat should not be applied until the first or priming coat is thoroughly dried, which under proper temperature conditions requires from two to three days. The second coat should be brushed out evenly and uniformly over the surface in the same manner as one would apply a finishing coat of floor varnish, and it should be given from four to six days for thorough hardening. Two coats develop a very satisfactory result, though three coats should be used where floors are submitted to unusual wear, such as floors that are used as passages, aisles, and runways over which heavy trucking is done.

Concrete floors of exceedingly coarse texture should be cleaned, thoroughly dry and well seasoned before the first or priming coat of floor dressing is applied. Either the transparent floor dressing or any color desired may be used, and should be applied by means of a suitable brush, such as is described for its use on concrete floors of fine texture. The dressing should be worked well into the pores of the concrete in order to bond and bind it thoroughly. The temperature conditions during periods of application and drying should not be under 70 degrees Fahrenheit to insure the best results. After the first coat is thoroughly dry all surface areas or spots which may show unusual absorption or penetration of floor dressing should be "touched up" or gone over with an additional coat of dressing, in order to prepare a uniform surface for the finish coat. After the first coat is thoroughly dry, the finishing coat should be applied, brushing same out evenly and uniformly over the surface, as described in the specification for concrete floors of fine texture. The finishing coat should be allowed to harden from four to six days.

Concrete floors of irregular texture—



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CEMENT—Continued

by which expression is meant those floors which are made up of extremely fine and extremely coarse texture, laid irregularly, which is sometimes due to carelessness, but often due to unforeseen conditions—should be given a joint application of the specifications described for concrete floors of fine texture, and concrete floors of coarse texture.

Concrete floors of normal, uniform texture should be cleaned, thoroughly dry, and well seasoned when the first

or priming coat of concrete floor dressing is applied.

Floors which are laid in colors, such as terra cotta, green, etc., or where inert colors are mixed throughout the cement veneer or wearing surface, after being thoroughly cleaned, dried and well seasoned, should be given two coats of transparent floor dressing, applied under the same conditions as is described for the normal or uniform texture.—The Concrete Age.



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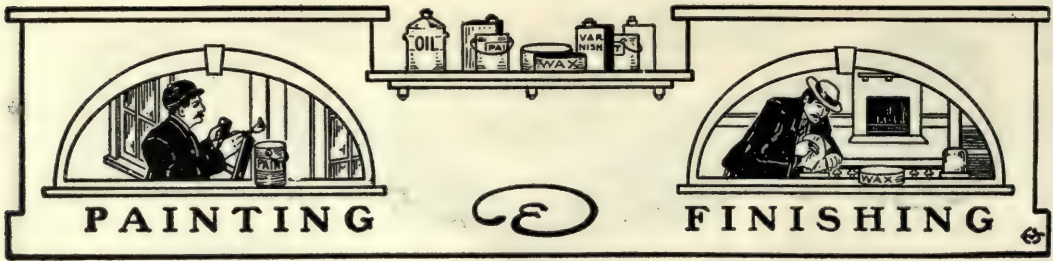
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DURING the past twenty-five years, the manufacture of builders' hardware in the United States has made greater strides than in the centuries before. Credit for this advance must be given to the inventive genius of the Connecticut Yankees. One of its greatest sons produced the pin tumbler cylinder lock, having the Yale type of key. The use of this key has been the great influence in the manufacture of builders' hardware in this country, and is the cause of its popularity and demand throughout the world.

The so-called art finishes on hardware trimmings, are today of interest to the architect, the owner and the decorator. Prior to the adoption of dark colored stains on the wood work, polished bronze, polished brass and Oriental design bronze goods were in great demand.

This design was popular in all places except Boston and vicinity. Boston would not stand for it. Boston was the home of the glass knob industry. The glass knob in the old days represented culture and refinement.

The glass knob and the simple trimmings used with it have won the fight with Oriental and other schools of art, and is today much in vogue.

Hats off to Boston and The Glass Knob! Both have had a great refining influence on American home life.

The wood knob and wood rose and wood key plate to match the wood work, were also in demand. The mineral, the porcelain, and the jet knob were used on the lower grades of work.

Dull brass or so-called lemon brass followed soon after. It will always be popular because it is a trimming which is a handsome and quiet contrast to the rich colored stains which are almost universally used.

Dull brass is extensively used on enam-

eled or light colored painted wood work. When the owner's pocket book will stand the strain, use gold plated hardware.

Some architects and decorators are partial to chocolate finish hardware where a brown stain is used. They do not want the hardware to be a contrast to the wood work, but believe in a harmony of colors.

Nifty hardware trimmers sometimes use a light dull silver on ebonized wood work. This is a glaring but pleasing contrast, quite Japanese in fact.

Formerly door butts were commonly made of cast iron, but this metal has been almost entirely replaced by wrought steel and bronze. Cast iron butts are liable to crack and cannot be given the handsome finishes of wrought hardware.

Wrought bronze butts will not rust and are particularly suitable for exterior doors. For general purposes, however, cold rolled wrought steel is the ideal metal for butts and hinges. The process of cold rolling increases the strength of the steel and gives it a clean, bright surface, which adds to the beauty of the plated finishes.

The finest grade of wrought steel butts are highly polished and heavily plated in dull brass, bronze, antique copper, nickel, and many other finishes. The finish of the knobs, locks and other hardware can be accurately matched. There are several new finishes recently placed on the market, among which may be mentioned the sand finishes, in which the metal is treated by sand blast before plating, and the Sherardized finish, a new process which prevents rust effectively. Butts can be Sherardized and then plated, giving not only a handsome finish, but one which is very nearly as rust proof as solid bronze.

Butts for use in less expensive buildings are not polished before plating, but



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White lead and water, with layer of linseed oil.



Mixture of white lead, linseed oil and water.



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the surface of the cold rolled steel, known in the trade as "planished," readily permits plating in the various finishes, although the finished appearance is not quite equal to the "polished" butts.

Usually the hardware is purchased before the full size details are drawn and the hardware man is forced to guess at what is wanted. This is the one great trouble of the hardware trimmer and is the cause of extras and returned goods.—Amer. Car. & Builder.

Staining Wood a Rich Brown.

One of the formulæ for staining wood a very rich brown is that given by Dr. Stalzell as follows: Boil one part of catchu (cutch or gambier) with 30 parts of water and a little soda. Apply this to the wood, and let dry. Make another solution of one part bichromate of potash and 30 parts of water. Apply a coat of this. By a little difference in the mode of treatment and by varying the strength of the solution various shades of brown may be given by this formula. The stain is said to be permanent, and also to preserve the wood.

Decorating, Past and Present.

A few years ago very little thought was given to the exterior of the moderately priced house, and even much less to the interior. The planning of a house was considered more from the standpoint of convenience and economy than beauty and artistic effect.

Starting in the beginning with very little attention paid to the type of its architecture, and with additions such as a corner bay window here and a tower there, the result was a mongrel type of a house that had no beauty and was often-times an object of horror to those sensitive to the good and the harmonious.

While this was true of the exterior, the crimes committed in the name of interior decoration were even more atrocious. We recall with a shudder the day of the over-decorated, stuffy "den," which at one time was considered the acme of elegance (save the mark!). The usual color of the den was red, brilliant and warm, and it was called cozy and comfortable because of this warmth of coloring. Heavy draperies and dark fur-

nishings added to this "warmth." Walls were hung with pipes, brasses, plaques and oriental lanterns. Ginger jars and wooden shoes were used for match receivers, and in fact, in every conceivable corner something was hung up to be ornamental regardless of its fitness.

Couch pillows of all sizes and shapes covered with all sorts of designs, such as Indian beads, canoes, beetles, and even spiders in their webs, expressed the prevailing idea of art. "Den" was an appropriate name for this sort of room—"cozy corner" a misnomer, while "chamber of horrors" would have been more fitting than either.

Also the houses built to-day are dependant upon the skill of the decorator both outside and inside, for their real beauty. Appropriate colors for outside painting are just as essential as the colors chosen for the wood trim or walls inside.

Surroundings should be considered as well as the type of house for exterior painting. Never advise the use of a color because you like it nor because it is desirable alone, but consider its relation to other houses around it. If this is followed out it will make certain localities very artistic and beautiful.

Craftsman houses and odd bungalows will have their day. People may like them now, but it is an extreme type and will become tiresome in course of time.

Interiors with heavy woodwork and heavy rafters, unless in spacious buildings, will become depressing. Imagine living in a room with heavy beams over one's head, and at no greater height than ten or twelve feet! Such rooms are contrary to nature. They are confining and in small interiors the feeling of weight overhead creates an unpleasant effect.

Interiors should be handled so as not to impart the feeling of limitation or confinement. Walls should not be treated as boundaries but as backgrounds for the furnishings (just as in a picture the background should never seem to be there). Walls should serve as a setting for the rest of the room.

This is a most important feature in decorating. Study carefully this first principle.
—Dutch Boy Painter.

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HE beauty, the durability and the sanitary qualifications of the Mosaic or tile floor has led to its introduction in the American home with a somewhat rapid progress since the concrete form of building has been so extensively used. With the advent of floors of this type the question of floor heating has been raised and leads to a study of the methods of heating buildings of the ancient days when tile floors were extensively used not only in homes but in public buildings. In some of the Roman buildings there were piers 6 in. square placed on about 24-in. centers on which the corners of the flat tiles which were laid for a floor, met. The piers were high enough to leave a space of from 16 to 20 in. beneath the tiles. Over these tiles a more attractive and smoother wearing surface was laid. In the colder seasons arrangements were made to send the smoke and gases from a fire through the flues under the floor formed by this type of construction. In this way the floor was kept at a temperature comfortable to the occupants of the room. This method of heating a room was the only one employed. In the recent construction of one of the college buildings of Cornell University at Ithaca, N. Y., tile floors are used throughout and to avoid complaint from a cold floor steam pipes were laid in cases in the upper surface of the floor around the edge of the room. The pipes were then surrounded with concrete and covered with a decorated tile. It is pointed out that this eliminates the use of a radiator in the room. This experiment will be watched with some interest by architects and builders and especially by men associated with the heating trade. In the average American home with its wooden floor any heat that is lost from the heating apparatus, whether it is a warm-air fur-

nace or a steam or hot-water heater in the basement, is absorbed by the floor, adding substantially to its warmth, and goes a long way toward making the building comfortable for habitation. In such buildings the question of floor warming or floor heating is of no moment, but heating contractors having occasion to install their work in residences which have concrete floors are liable to meet a new experience, particularly where concrete or tile floors are extensively used.—The Building Age.

The Unsightly Radiator.

Ever since that interesting architectural feature of a room, its fireplace, was supplanted by ugly cast-iron registers or radiators, the heating engineer who sees to these latter, has been at war with the architect. The man who installs the new system generally insists that, for efficiency, its outlets, whether radiator or register, must be placed in the most prominent spot in the room. This the architect, being hampered by an imagination, opposes and suggests an unobtrusive corner or under a window seat, or else that he be allowed to convert the cast-iron monstrosity into an attractive bit of design. "But that would not make a good heating job," protests the other, in whose mind ugliness and comfortable temperature are inseparable companions. For long years he tyrannized over us, till some audacious architect placed beautiful little terra cotta screens, of charming design and workmanship, over the hot air outlets. Forstalling the engineer's complaint that the interstices were smaller, the architect increased the whole surface of the outlet so that the same amount of vent was obtained as through the average cast-iron stock size register. The heating engineer looked dubious, but the inhabitants of the house have not frozen to death. Since these first experiments



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- how smoke and gases, instead of going to waste up the chimney, pass up into the fire and are consumed, producing *useful* heat;
- how the heating surfaces are automatically kept free from soot, the fire-glow playing upon clean metal—responsive to heat; whereas in other heaters, the "fire-shine" is upon heating surfaces deadened with soot.
- how live coals are continually kept in close contact with the heating surface instead of being blanketed with fresh coal; and how this heating surface represents the greater part of fire pot and dome, whereas in top feeds live coals are in direct contact with but a narrow belt around the heater's fire pot.



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succeeded it has become the custom in all better class work where hot air or any other indirect heating system is installed to have specially designed registers in bronze, terra cotta or perforated marble, of Pompeian, Renaissance, or other harmonious pattern. These, of course, are expensive but they are in rooms where money is willingly spent for every other detail.

Once the register was proven amenable to improvement, architects turned their attention to the more difficult task of concealing radiators—those hideous objects made even more so by bronze, aluminum, or japanning. Here, besides the stubborn heating engineer to be overcome, was the fact that the size of the radiator was determined by exact calculation, and its position in the room by the question of efficiency rather than by mere appearance. Efficiency generally meant under the most prominent window. In brick or stone houses it was found possible to conceal the radiator in the thickness of the wall under a window, boxing it in to form a seat with screened front and top. This gave considerable surface

for radiation though not enough to satisfy the man whose eagerness for "a good heating job" justified no end of eyesores in the house. This is now the approved method, and is not very expensive if ordinary chair cane is used for the screen; cane being not only cheap and easy to replace, but also harmonious in rooms of informal treatment. Even in frame houses, where there is no wall thickness to help solve the problem, architects are devising boxing-in schemes, which do away with the former unsightly radiator in all its nakedness. The heating engineer still grumbles, but if this improvement interferes with radiation, then it is his business to remedy his system and make it commensurate with good looks.—House Builder.

The Future of the Plumber.

It is a safe prediction to say that the future of the plumbing business is going to be on a higher plane, that there will be more of it, and that it will prove much more profitable. It will also be better understood and plumbing will be in greater demand. Scarcely any one will be without it. A building of any kind without plumbing will be a rarity indeed. Plumbing will be just as essential as the cook stove or the gas range. The humblest homes will have their bath rooms, lavatories and stools. There will be more work for the plumber and he will handle it with more skill and profit, because the plumber will know his business better than he ever has before. In this respect he is bound to average higher. If he fails to realize this and meet the issue squarely, he will fall behind in the race. The opportunity is going to present itself and the plumber must be wide enough awake to grasp it and turn it to his use.

In order to meet the new conditions, the plumber must be as competent as the average business man in other lines.

Scientists and physicians, states and cities, are engaged in a constant effort to educate the people to a responsibility or better care of general and individual health in every community. The plumbing business is closely allied to any movement having this result as its object. As this movement progresses the plumbing business will increase and progress with it.—The Builder's Guide.

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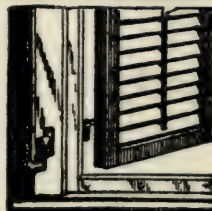
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SPLINTERS AND SHAVINGS

Honesty in House Building.



NO LAYMAN should buy a house without its first being examined by a competent architect," declared an authority, on being asked to sympathize with a friend whose recently purchased, newly built, suburban home necessitated extensive and expensive repairs, says a recent issue of *House Beautiful*. "It was one of several dozen attractive houses making up a colony in Westchester and called, say, Ashlye-Burton Manor or some equally high-sounding name, for high-sounding names go far toward selling real estate. There was no doubt as to the picturesqueness of the houses in question; they had the appearance of having been designed individually. To be convinced of their merits one had only to glance at an old, contractor-built row of 20 narrow little peaked wooden houses, which, all connecting, all precisely alike, and flush with the street, stretched their dreary ugliness just beyond the 'Manor's' sacred precincts, and which, so prospective purchasers were told, were soon to be pulled down. Meanwhile they acted as a most convincing foil for the newly completed concrete and shingle 'cottages de luxe' offered for sale.

"How could young couples in search of a 'nest' probe beneath that surface attractiveness of 'English' brick fireplaces, chestnut wainscoting and ceiling beams, small panel and broad muntined windows, and the ubiquitous pergola? Or, if the more cautious had misgivings, were not these quieted by the builder's assurance that his brother, who designed the houses, 'was formerly with McKim, Mead & White.' Such an assertion, to those who know nothing of the large floating army of inferior architects taken on temporarily by every large firm in a rush season, is convincing. Perhaps it still consoles the residents of 'Ashley-Burton Manor' as they contemplate cracked walls that were papered before the plaster had dried out; fireplaces too shallow

to permit draught; wainscoting all shrunken; because the wood was unseasoned; front bedrooms icy in winter because they were built over verandas without the precaution of felt flooring, or on pergolas prone because they were planted in only a foot or less of earth.

"A few—but only a few—of the colony have discovered that for the entire collection of thirty or forty houses, only three or four different plans were used, the rest being merely variations of these—a difference of material, or a veranda on the side instead of the front, or the house placed endwise instead of lengthwise to the street. It is too bad that the commendable ambition to 'own your own home' should be taken advantage of in this cruel way, but it might have been avoided had intending purchasers hired an architect to go over the house first and report on its honesty of construction and quality of the material. Indeed, if contractors knew that their work would be submitted to such an examination before purchase, the knowledge could not fail to force them into more scrupulous methods."

The Use of Brick for Cellar Floors.

Apropos of the extent to which concrete and cement floors are being used in cellars of buildings of various kinds the following comments touching the use of brick for such a purpose may not be without interest. The ideas are those of a correspondent of the *Clay Record* who expresses himself to the following effect:

Some time ago I built a fairly large hospital, the basement of which was full measure below the top of the foundation walls. Owing to a lack of funds the question of flooring the basement was left over until the upper part of the building was about completed, when an additional sum was realized, and a portion of it put aside by the trustees for the purpose of putting in some sort of a floor in the basement. There was not sufficient money to lay in a cement floor, so it was

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It is absolutely wind, weather, storm, fire and lightning proof.

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was used as a base for the stucco.

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SPLINTERS AND SHAVINGS—Continued

suggested that a hard brick pavement with cemented joints be put down. This was done, and though half a dozen years have elapsed since the floor was laid, there has not been one cent spent on it for repairs, and it is as sound and as clean, and as good from a sanitary point of view as when first laid, and cost but little more than half the money it would have taken for a cement floor.

—Building Age.

Hardwood Flooring Troubles.

The laying of hardwood floors (kiln dried) requires a great deal more thought and mechanical skill than a great many imagine. When the carpenter has completed a nice pleasing job of floors and shortly afterward he is asked to come back; and is shown where they have raised up, and he is told that he did not put in good stuff, his work was faulty and a hundred and one other things that he is not to blame for, it is most certainly very annoying.

What the writer proposes to discuss here is: what is the cause of this trouble, and how it may be overcome. In the first place every carpenter knows that very dry lumber is easily acted upon by dampness and he also knows that the only thing that will cause a floor to raise, is that the floor has swelled up after being laid, and that the only thing that will make it swell is dampness. Tell the average lay person that dampness has caused their floor to raise and they will not believe you; they will say that can-

not be, for there never was any water put on it, etc. I want to state right here, that it is not necessary to wash the floors with water or put any on them for them to absorb moisture enough to cause them to swell sufficient to throw them out. It will be observed that floors seldom act in this way in the winter time when there is heat in the building, but it usually happens in warm weather and after a period of wet weather when the air is full of dampness. So much for the cause.

We will now see if anything can be suggested that will in any way tend to overcome this trouble. When the carpenter is called upon to put down hardwood floors, the first thing he should study is the existing conditions. He should investigate and see if there would be any likelihood of any dampness coming up from below through the under floor. If so, either of the following preventatives may be used; the hardwood flooring may be well painted on the under side with a good waterproof paint, or a good waterproof paper may be used between the floors. As soon as the floors have been laid, they should be finished on top with some reliable waterproof finish. They may be oiled with boiled linseed oil, or they may be filled with a good paste filler, then shellacked and varnished, or they may be given a wax finish.

Another precaution that should not be overlooked is to allow room for the floors to work. At least a $\frac{1}{2}$ -in. space should be left at each wall, which would be covered up with the shoe. Then in case the floors take up a little dampness it will have room to push to the wall.

It will also most generally be found that when a floor does rise it is about the center of the room, showing that it pushes both ways to the walls and then to the center.

Considerable $\frac{3}{8}$ -in. thick veneer flooring is being used for floors in old buildings. The writer has found by experience that the narrower the flooring the less liable to give trouble, for the reason that there is very little nailing body to this $\frac{3}{8}$ -in. stuff and you have to use a 4d or $1\frac{1}{2}$ -in. casing nail, and with the narrow stuff you get a better nailing surface. The National Builder.

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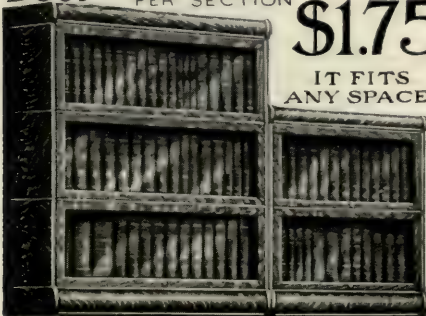
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Some of the manufacturers have entered the publishing field, and send out little monthly magazines devoted to pungent paragraphs and jokes, also incidentally to a gentle reminder of the goods they carry. Among these are the Latch String, published by the W. S. Tyler Co., Cleveland, O., Bronze Works. The Arrow, published by the N. and G. Taylor Co., Philadelphia, Pa., manufacturers of Roofing Tin and Cottrell. Magazine, published by C. B. Cottrell & Sons, New York. Also the Spectrum monthly, by the Sherwin-Williams Co., Cleveland, O., a little gem of artistic composition. All of the above are lively and fetching little publications.

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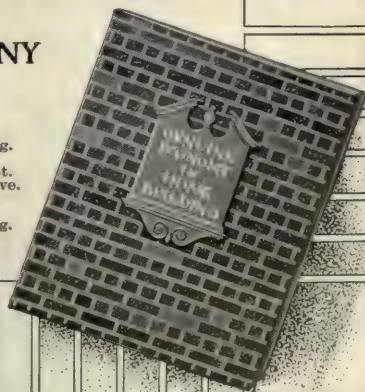
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KEITH'S MAGAZINE

VOL. XXIX

APRIL, 1913

No. 4



A HOUSE ON THE HILLSIDE.

A Hillside House

By Una Nixon Hopkins



HE first thing to consider in building a house is the location and surroundings. Unfortunately, in these days of subdivisions, the majority of lots are practically the same size and proportion, which results in a line of crowded, uninteresting houses.

Certainly there can be very little more inspiration for an architect to design houses over and over again for the same kind of a lot than there would be for an

artist to repeat the same landscape on canvas many, many times.

Now and then some independent person secures a piece of ground regardless of conventions and gives his architect a chance to create something really original. That is what happened in the present instance.

A plot of very rugged, uneven ground on the hillside commanded a fine view. For this reason it was chosen as a home-



THE LIVING ROOM.

site. And not only are the rooms so arranged that every one looks out over the valley, but the house physically suits its

environment. It is not a blot on the landscape, but a consistent part of it.

The house is surrounded by little hills



THE DINING ROOM.

of varying height, and the house, as may be seen in the picture, is not unlike them in character.

The dull brown stain of the exterior is in perfect harmony with the scrub oaks and sage brush which grow in the vicinity. The main body of the house is covered with shakes which look very much like shingles.

the furnishings—everything is arranged for use and comfort.

The dining room is in a wing by itself and there are no rooms above it. This arrangement was for the sake of protecting the view of one of the second floor sleeping rooms and its adjoining balcony.

In one end of the dining room a bay window sets out and consists of one im-



DETAIL OF THE ENTRANCE.

Over the front entrance is a balcony—Swiss in detail—which balances the gable above it, and onto this balcony two doors open. From here there is an uninterrupted view for twenty miles.

The porches are uncovered so that plenty of sunshine and light may be enjoyed within.

A long, comparatively narrow living room has canvas covered walls and a rustic ceiling, with simple built-in bookcases. The fireplace is of rough brick. No attempt at effect has been made in

mense pane of glass with narrow windows on either side. This window is lightly curtained with white muslin, so that the view is not obscured.

The bedrooms, too, are simple, sanitary and livable, with their balconies and many windows—and well lighted, spacious closets.

Very little has been done to the grounds except plant a few more trees, some ferns and shrubs. The idea is to keep the natural setting as far as it is practical to do so.

How We Built Our House

By W. J. Freethy



WHEN the writer was asked to design the house described by this article, the task seemed an easy one until the owner said, "I must have a home for the summer which shall contain all the conveniences of my town house, accommodations for my family of six, a guest room, and maid's room, and which must be built for a reasonable sum, and at the same time be comfortable, ar-

The long lines of the front and rear roofs, the cornice above the second-story windows between the two gables, are all proportioned with the idea of accenting the length and reducing the apparent height of the building. The piazzas are wide and inviting, and one can, in this house, escape the sun at any time, and also find corners screened from either the prevailing summer wind when hot or the north-



THE PIAZZAS ARE WIDE AND INVITING.

tistic and homelike." This seemed a good deal for the price stated, and it was with a great deal of apprehension on the part of all when the plans were submitted to the builders for bids. A reasonable bid from a responsible man settled all the doubts, and after a few months' work we have the result. The plan of this house, which was built on the "shore," has found so much favor that it is recommended as a general plan for an all-the-year-round house. The house is more than one story in height, and is moreover fifty-three feet long in its extreme length and twenty-nine feet wide.

east wind in somewhat inclement weather. The pergola treatment with lattice panels between the posts will in time be much enhanced by clinging vines or crimson ramblers which will give an added touch of color to the scheme.

The real front door is on the side, and is protected by an open framed timber hood, above which is a small overhanging bay with comfortable seat in the guest room. The dormers in the roof light a large, comfortable attic which will eventually be stained in soft colors for a den. It is really a surprisingly roomy place for a house which seems, from the



A VIEW OF THE HALL.

exterior, to have no third story whatever.

Entering from the front piazza one discovers a large front hall with ample coat closet, and the lower treads of the staircase leading to a landing lighted by a long flown bay. This landing opens into

a small flight of stairs leading to the kitchen and to the main stairs leading to the rooms above. The stairs themselves are screened from the main house by the wall of the hall so that the maid may ascend without being seen.



THE LIVING ROOM.

The hall and living-room are practically one room, and for that matter the dining-room also is part of the living-room, being separated only slightly by a treatment of square posts and arches all of wood with panels below. The effect of the whole is that of one large hospitable living-room.

There is at one side, directly opposite the door as you enter, a generous fireplace laid up with red water-struck brick

tual floor timbers, two heavy sticks a few inches apart forming each beam, the whole being cased with wood to match the room. There is a boxed-in seat extending across the end of the living-room under the windows of the bay. At one end of the dining-room is a built-in sideboard containing drawers and cupboards for table linen, etc. On each side of the sideboard is a closet, one for magazines, books and for articles to be hur-



THE DINING ROOM.

and white mortar. The fireplace is large enough to accommodate a four-foot log. A panel of brick laid in an interesting pattern is an added feature. The room is paneled up five and one-half feet high with a dado of wide boards, the joints between being covered by a batten. Above the panels are small brackets supporting a plate shelf. The walls above the dado are treated in rough plaster stained a soft green, which has the effect, at first glance, of being some rich velours or tapestry. The rough plaster panels between the beams are stained with a light buff color. The beams are the ac-

riedly stored away, such as sewing when visitors are expected.

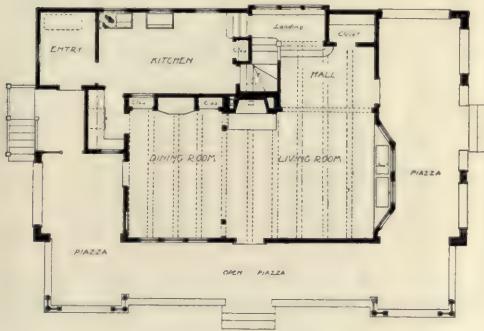
The other closet, for china, opens also into the kitchen, so that the dishes from the table may be passed through, and when washed may be shelved ready for the next meal.

A roomy pantry connects the dining-room with the kitchen. It has plenty of shelf room, drawers, cupboards and molding slab. The kitchen is a light, airy place with soapstone sink and laundry trays; space has been found for an ample tin closet. One feature of the kitchen is worth noting, and that is the absence of

hot-water boiler, which has been conveniently located in the cellarway. There is also provided a vent flue and register to same to carry off the odors of cooking. In the cellar is ample room for furnace, store-room, etc. The foundation walls of this house are concrete which is an excellent substitute for the ordinary stone

The rooms are finished in North-Carolina pine stained a silver gray, this being a charming color for the simple bed-room papers. The floors, here as well as in the lower rooms, are of rift Georgian pine, which next to oak is perhaps the best.

A word here might be said in regard



First Floor Plan.



Second Floor Plan.

wall, being clean, free from cracks, and above all, sanitary and substantial.

On the second floor are four family bed-rooms, a guest-room and maid's room, all with ample closets, and in the hall a linen closet and broom closet may be found. This style of roof gives also plenty of room for closets under the eaves in this house.

to the bath-room, which is a large one with the seat in an alcove, leaving ample space in front of the other fixtures. There is a large closet for medicine and towels and clothes hamper. The woodwork is stained mahogany, with white painted walls and the bright nickel plumbing. In the attic is room enough for two maids' rooms.

Ideas for the Kitchen

By Mabel Putnam Chilson



HY is a kitchen generally considered a necessary adjunct to the back end of a house, instead of being at the side, in the middle, or wherever else best related to the other rooms?

Fortunately nowadays, many architects are showing more respect for the rear of city houses than used to be the case. Rows and rows of modern houses are being equipped with bow-windows at the back, overlooking restful lawns; the

kitchens in these instances being generally built at the side.

If prospective home-builders would only stop to consider how much importance attaches to the outlook, they would arrange their rooms and windows with this idea in mind. For instance, if the view from the back end of a lot is pleasing to the eye, while the front view is positively distasteful (it being taken for granted that one must utilize this particular lot), why not arrange the rooms so

that one may rest in his easy-chair beside the pleasant window; pushing the kitchen to either side or front, and leaving this restful view for dining-room or parlor?

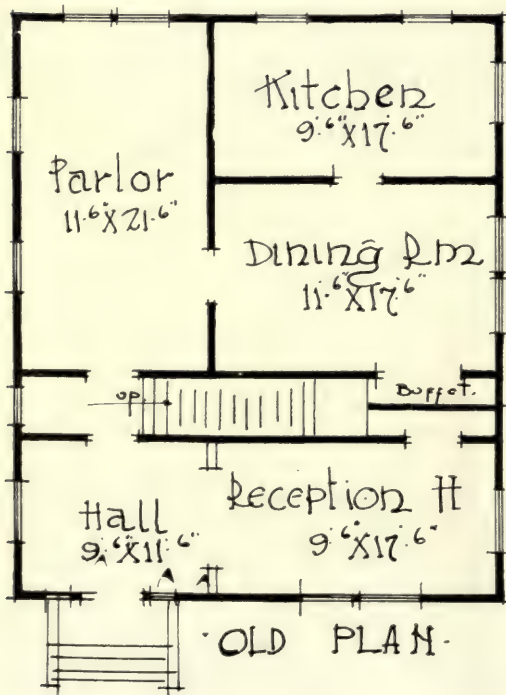
It is of course assumed that one is too busy while in the modern kitchen, to stop and fondly gaze upon the view. If such were the case, then the kitchen door or window might purposely be placed to such advantage.

A city full of hills is perhaps the best to judge by, with regard to the outlook from its houses. San Francisco is an excellent type, its varied elevations giving possibilities for magnificent views of bay and ocean. On one of the hills near the Presido reservation, and backing down towards the Golden Gate, lies a picturesque garden arranged in terraces. At the front end of this lot, but a few feet back from the sidewalk, stands a house which faces the east. As there is no view from the front, except that of orderly homes, the owner had what was once a reception-hall turned into a kitchen. This occu-



pied the northeast corner of the house. Then a solid wall was built into the space formerly given over to an archway from the usual, stereotyped hall. The front door was left in its original place, southeast corner, while a short hallway was devised, leading directly to the living-room. This room was planned to embrace the entire width of the house, taking in the space formerly occupied by the separate dining-room, as well as the former parlor and kitchen. Now the occupants have the combined pleasure of a dinner accompanied by a view of the Golden Gate, together with the warmth from a stone fireplace. Formerly a kerosene heater had to be used to heat the dining-room.

From an inartistic, stereotyped house, built on a gorgeous site, but with no advantage taken of its possibilities, the place has been transformed into one of beauty and comfort, with every chance for view, sunshine, and pleasing arrangement taken advantage of and developed. And all because of a shifted kitchen.



Electric Light Fittings for the Wood Craftsman

By Arthur E. Glead

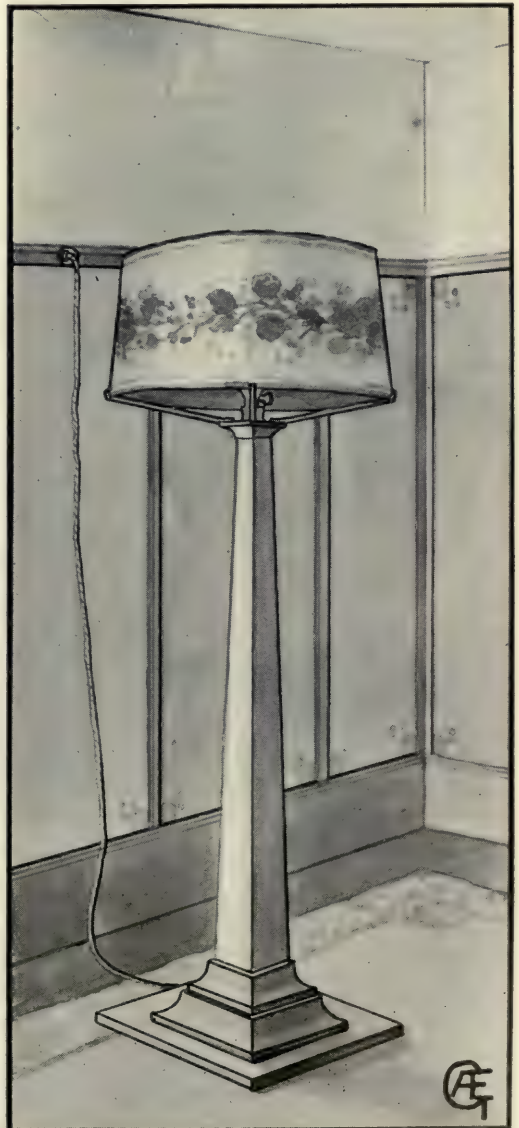


WHEN a new invention comes into general use, it is often some time before the designer of fittings adapts his designs to the new conditions. When gas was first used as an illuminant the fittings largely followed those previously in use for candles, and the word chandelier, which really means a holder for candles, was still used for a large central gas fitting. Later came such developments as the sunlight fitting, which showed the advantage of gas as it could be placed close up to the ceiling where it heated the air less and aided ventilation, especially in large buildings.

With the introduction of electric light, the first fittings designed followed closely on the lines of gas fixtures, but these were quickly followed by others which took advantage of the great adaptability of the electric bulb. These advantages are mainly the small amount of heat and danger from fire and also the ease with which the lamp can be hung in any position by a simple wire cord. The first two advantages are valuable to the craftsman, for they make it possible to use wood for shades and fittings, and wood is a material which can be made to harmonize successfully with any scheme of interior decoration.

The wooden hanging lantern illustrated is for a hall, to be hung from the ceiling as a central ornament. Executed in Flemish oak, to a scale of about twelve inches wide by fifteen high, it would have considerable decorative effect. An advantage with electric light is that such a fitting need not be made heavy, and a framework of oak about an inch wide and three-

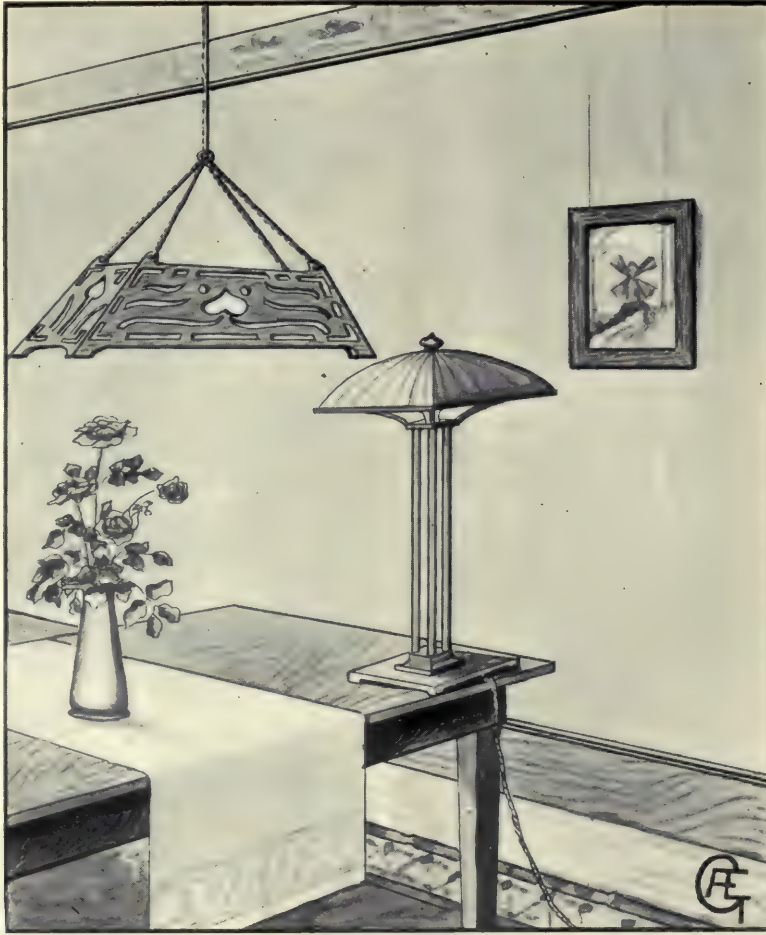
eighths of an inch thick would be ample. The lower panels are filled in with thin translucent silk of a gold shade, pleated



Portable Standard Fitting with Shape of Dresden Silk.

from the center to give the effect of rays of light. The narrow upper panels are of plain stretched silk, decorated with transparent water colors with a formal landscape design, in shades of warm greens and browns. If such painting was beyond the power of the craftsman, Dres-

square and mounted on small square feet. The silk shade is made up on a square wooden frame, fitted with a wire dome frame on which the silk is pleated, and finished off with a wooden knob at the top. The under side of the base should be cut out to take a square of sheet lead,



HANGING SHADE WITH PIERCED WOOD AND TABLE STANDARD WITH SILK DOME.

den ribbon could be used with a floral pattern in brown and gold, although of course the effect would not be quite so original.

The small standard table lamp would be useful for reading purposes in a library or living room. The standard is composed of four slender round pillars, set into blocks edged with mitered molding. The base should be about eight inches

to give firmness to the lamp, and the feet should be covered on the under side with felt to obviate any chance of scratching a polished surface. The finish of the wood should of course conform with that of the room, and no attempt to disguise the wire connecting the lamp should be made, but let it be stretched quite visibly up the center between the four pillars.

The hanging shade of pierced wood is

specially designed to throw a good light below and leave the room in shadow. It would be excellent over a dining table if fitted with two or three lamps, or made on a smaller scale with only one lamp it would be useful as a light for a piano. The wood used should be as thin as can be conveniently worked, and even if made of a size to suit a dining room should not exceed a quarter of an inch in thickness. The pierced design should be executed with a scroll saw, and the inside of the shade lined with a suitable tone of silk. An increase of light could be obtained by a second lining of white silk on the inside, to act as a reflector.

The portable floor standard lamp, if finished in a dull surface ivory enamel and fitted with a shade of Dresden silk, would make a dainty addition to a bedroom with a color scheme of ivory and old rose. The slender pillar is built up of four pieces in box form and mounted on a base of heavy molding, and with a head-piece of the same material. It could be fitted with one or more lamps, according to the amount of light it was expected to give. As a bedside reading lamp it would be useful, in which case the switch should be arranged within easy distance of the bed. An alternative use for this design would be to use a pair of the standards as fireside lamps. In an oak fitted hall or library, which had a projecting fireplace, they would add pleasant emphasis to that part of the room, and if made of oak would be handsome in appearance.

The use of wood for electric light shades and fittings, in the hands of the craftsman, opens up a new field of activity. Whatever form the designs take, they should be light in structure, as that is one of the main advantages of this form



Hanging Electric Lantern with Panels of Pleated Silk and Painted Silk Border.

of illumination. The fact that the current is conveyed by means of a wire cord should be made use of in the design rather than concealed, and in the case of pendant shades or lanterns this cord should be used to suspend them, although of course only one is needed to conduct the current. The use of silk as a shade is also to be commended, as not only does it pleasantly subdue the light, but also offers a good chance for color harmony, which, in conjunction with the wood, offers fine scope for original and beautiful work.



Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

—John Evelyn, 17th Century.

A Rocky Plot Transformed

By I. M. Angell

IF a house plot is seven-tenths "filled" land and three-tenths large rocks and small stones, the choice is between gardening in barrels or not gardening at all.

A flower or vegetable garden, that is both profitable and entertaining, may be grown in this unusual manner. The plan has some advantages over more orthodox methods, for a barrel garden means no digging, weeding, or hoeing.

The first step is to properly prepare the barrels. Several holes must be bored in the bottoms, to provide good drainage, then a quarter or more of the depth may be filled with coarse material, to further assist the drainage, and also as a foundation for the more compact, richer soil above; this should be mixed to suit whatever plants are to be grown in the barrel, varying in richness from pickles and strawberries down to the poor soil that

will be all-sufficient for a gay display of nasturtiums. It is well to leave a space of four inches unfilled in the top of the barrel, as this makes it easy to give the plants a good watering without overflow.

In the garden where some of the following experiments were tried the star crop was cucumbers. The barrel, containing three plants, stood in a corner by the porch, where the soil was composed of cinders and other materials that most plants find indigestible, so it covered a barren spot, beside supplying a delicious and ornamental vegetable. Being very handy to the laundry, it received the benefit of a pail of soapy water now and then, a dose which is acceptable to tomatoes as well as cucumbers. The cucumbers borne on these vines exceeded, in size and quality, the same variety sown in neighboring garden patches, where they received the usual treatment. The

vines, also, were uncommonly thrifty, reaching a length of fourteen feet, and running over the porch and on the ground around the barrel.

Tomatoes added an important item to the history of the barrel garden. They were placed in a berry thicket, on a rock, which, because of its size and shape, was worse than useless. Three plants, each a different variety, were transplanted into this barrel in soil that was purposely made not very rich, to avoid a growth of foliage at the expense of fruit. The yield was about two hundred tomatoes. The location proved fortunate when the first frost came, for the tomatoes in the barrel escaped, while those lying nearer the ground were destroyed.

A barrel of muskmelons was an interesting addition to the collection, though, as its career was cut short by frost, its history was less complete than that of the others. This barrel stood on "filled land," a sort of soil which has not a reputation for nourishing qualities, and is, therefore, well fitted for barrel gardens.

A barrel was sawed in two and each end perforated for drainage, and a coat of paint added for appearance sake. Coarse material was put in first, to keep



Three Varieties of Tomatoes Growing in a Barrel.

the finer soil from washing out, then two generous pailfuls of very rich soil was added and on it was sprinkled five cents worth of pearline, with hot water poured over it; this was to destroy possible fungus growth. Sand was added to fill, and



PETUNIAS GROWING IN A STONY CORNER WHERE THE SOIL WAS USELESS.



Keg of Nasturtiums Blooming on a Flat Rock That Was Otherwise Waste Space.

mixed with the other soil. Cannas, nasturtiums and other plants were grown in these barrel tubs, but many other kinds might be chosen for the purpose. Liquid manure might be used to water any plants that demand the extra richness.

An attractive "bouquet" effect can be

made by boring holes six inches apart in the sides of a barrel and filling with rich soil. A seedling is placed in each hole. As each row of holes is reached, the earth must be made firm before adding the next layer. When the barrel is full, geraniums, or any other showy plants, may be placed in the center, with mignonette and alyssum around the edges. In the holes the following plants have been used, according to the color scheme desired: marigolds, sweet peas, portulacca, nasturtium, California poppy, phlox, heliotrope, pinks, petunia, verbenas and pansy. This barrel received the laundry water. Pruning was found necessary to keep the plants in good form, besides encouraging new growth, which in turn resulted in more bloom. It is possible to take a barrel of this sort indoors to escape the frost, and provide castors, so all sides can be turned to the sun.

One nasturtium barrel which was a great success stood in a sunny spot by a high fence, and was filled with a rather poor sandy soil. Seeds were sown directly in the barrel and flourished from the start. The vines covered the high fence and the sides of the barrel, making a gorgeous spot of color.

Giving Character to a Square House

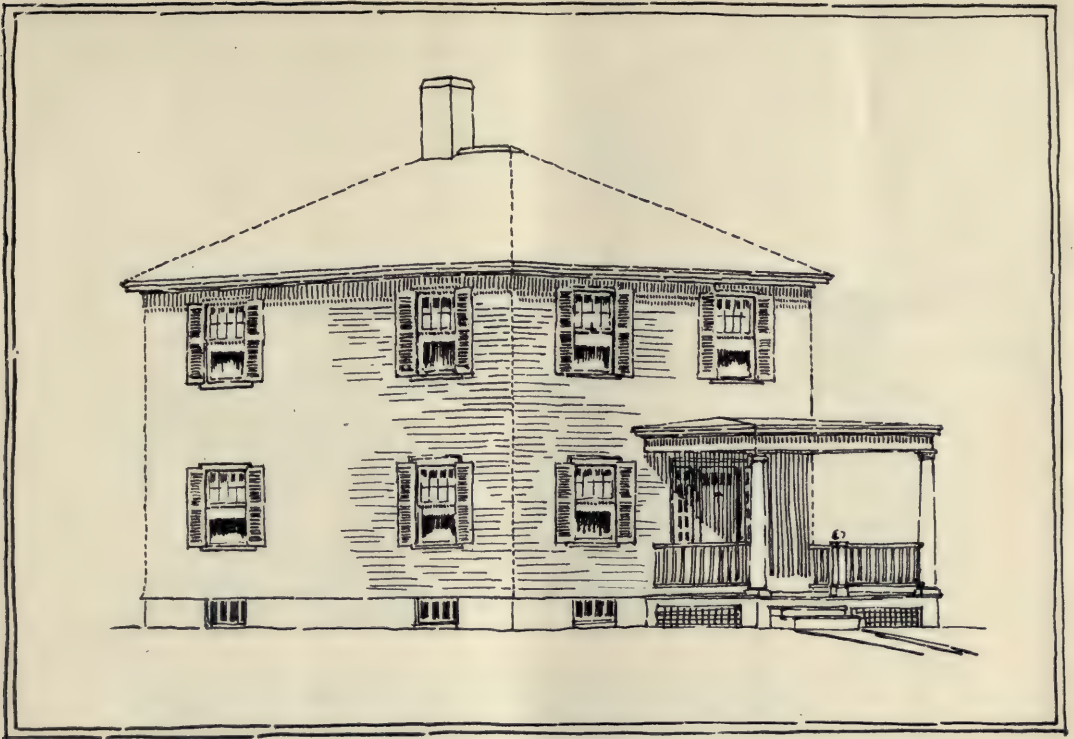
By E. I. Farrington



ALL the many types of houses, good and bad, few are more disheartening than those which resemble merely a square box, pierced with square holes at regular intervals. Such houses are cheap to construct, and one finds them everywhere, built sometimes by people who have scraped together a few dollars with which to put up a house to live in, but more often erected by speculators and disposed of at low price. To make the situation

worse, from an architectural viewpoint, they are often built in rows, scarcely varying even in the details of a door-knob, stock material being used and ordered in quantities to secure the discount.

It is needless to say that houses of this type have neither character nor charm. How anyone can feel at home in them is a mystery. That they do not satisfy, and that their lack of individuality is felt after a time, if not at first, is indicated by the number of attempts made to alter the



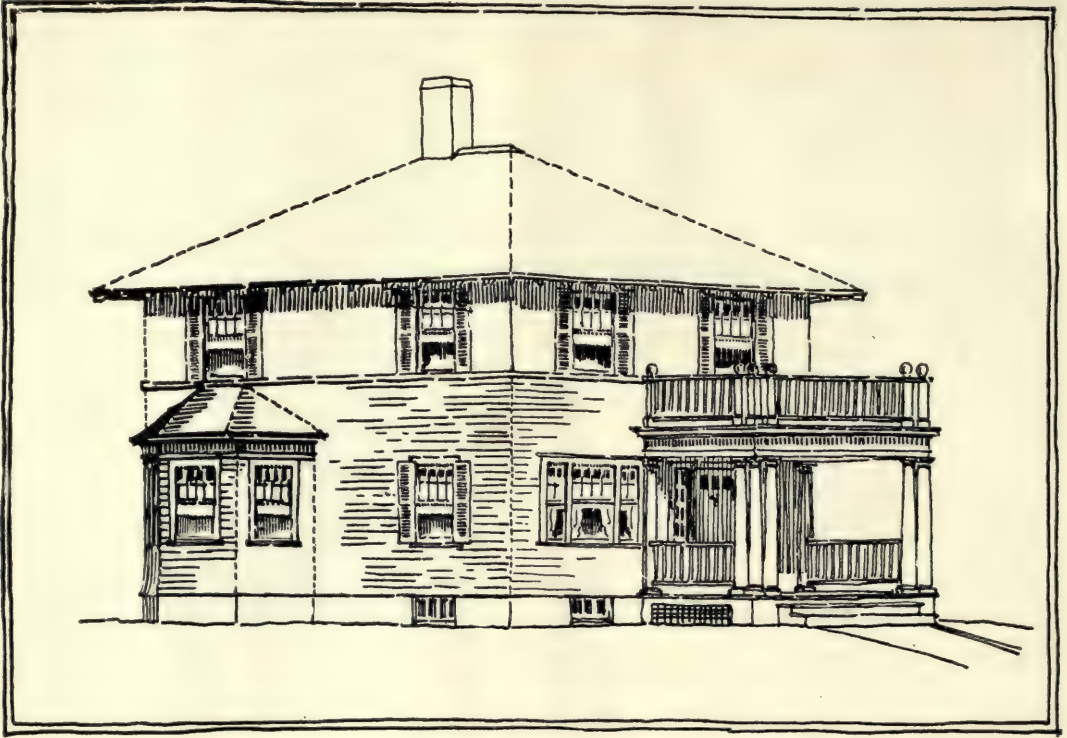
THE PLAIN SQUARE HOUSE.

exterior appearance. It may be hard for an architect to muster much enthusiasm when attacking a problem of this sort, but it is not an impossible matter to make a fairly respectable house of one of these square boxes without calling for a large outlay.

In the accompanying sketches two ways of treating a square house of conventional design are illustrated. Sketch No. 1 shows the house at the beginning. In the second sketch a change is indicated which breaks the square lines of the first floor, and another which alters the roof construction, giving several additional rooms on the third floor. The introduction of a bay window is a suggestion which the owner usually approves. It is always wise to make it amply large, and to tie it to the ground, using lattice work if stone is too expensive. When added to an old house, it is also important to exercise special care to make the roof perfectly tight where it joins the house.

By raising the roof and inserting dormers quite a different aspect is given the house. This sort of treatment is to be recommended chiefly when there are numerous houses of the same pattern in the immediate neighborhood. Although the eaves are at the same point as before, the house seems appreciably higher, owing to the increased elevation at the center. Skill is required, though, in order to place dormers in order to secure satisfactory effects. All too often the owner says, "O, I will put it up to the carpenter, he will know how to make a dormer look right." Seven times of out of ten the carpenter does not know, and in some instances, the appearance of a house has been spoiled because of this reliance upon the judgment of a man who is not supposed to be an architect, and should not be blamed if he lacks an architect's skill.

Vertical dormers are most used, and are most satisfactory for a house of this character. They give a feeling of height,



ADDING A BAY WINDOW TO BREAK THE SQUARE LINES OF THE FIRST FLOOR.

but must be designed with care, or they will make the roof look top heavy. It is best to have the windows a little smaller than those below. In the illustration the dormers are made with the front showing hips, and having about the same slant as the house. It is a trifle more work to make this sort, but the effect is particularly good on a four-sided roof, as the dormers do not show up as conspicuously as when gabled, and fit in better with the roof lines. Square topped Dutch dormers might be used, but probably not with as good results. They are rather cheaper to construct.

When we come to the second sketch we find our square house really metamorphosed into a dwelling with character, at least, and not without a degree of charm. It illustrates about as complete a transformation as can be made without spending considerable money. Yet the changes

are few, and simple enough in their nature. Chief among them is stripping the clapboards from the second story to a point just under the windows, and substituting a band of cement stucco. This is a very effective scheme, and one which the owner would never be likely to think of. It gives him a house which looks quite different from those of his neighbors, even though not a single other change should be made. Other changes are needed, however, in order to carry out the architect's ideas. Brackets are placed under the eaves to simulate exposed beams. Of course, this may be called faking, but it often is done when new houses are built, and in this instance, at least, seems entirely permissible. This construction completes the artistic effect begun by the stucco on the second story exterior.

In line with these changes are those

made on the front of the house. Triple windows in the parlor help to produce a less stilted characterless effect. Much can be done with the windows in almost any house. They are one of the intelligent architect's most important assets. In this case, one simple change has done much to introduce a home-like note.

Several changes have been made in the

to tin, wearing well and being noiseless when walked upon. Of course, it must be painted. The railing should be wholly unpretentious and square pieces are better than round balusters.

Whether one pillar is used below or three as illustrated, it is most important that they be large enough. Few features of a house can make it look as cheap and



RAISING OF ROOF AND INSERTION OF DORMERS GIVES ADDED SPACE ON THIRD FLOOR.

balcony to improve the general appearance. There are now three posts instead of one at each corner and a rail around the top. A flat roofed porch usually looks better when a rail is added, especially when the house has a pitched roof. There is no reason why the balcony thus created should not be used. Often an upstairs porch is to be desired, but the deck should be covered with canvas such as is sold for this purpose and which is preferable

mean as the petty, foolish little posts commonly seen. Whether square or round they should look large enough to give an impression of strength at any rate. And they are better with smooth surfaces than fluted or made to bulge with wart-like protuberances. Simplicity should be the key note in a house of this kind and with the changes suggested, properly made, our square house begins to look like a real home.

Building a Moderate Cost Suburban Home

By A. E. Marr



ALL will admit the expenditure of money will build a house, nevertheless, it requires the application of a keen personal interest, coupled with painstaking planning and thinking, to build a home with success.

The frame is two and a half stories, of new, seasoned, straight-grained, square-edge spruce stock, pinned together with seasoned oak pins and boarded in with covering boards of seven-eighths stock, those on the walls being not over ten



A UNIQUE SUBURBAN HOME.

It is a comfortable window seat here, a cheerful fireplace there, a porch just hidden from public gaze, placed where the summer winds cool it, and so inviting in its secluded comfort; perhaps a hobby of a hall just framed to hold that old clock, or the chair with its priceless associations. It is this thing and that thing and dozens more, all little seals placed in and on the home, which stamps it unmistakably with the owner's personality.

inches wide and matched. The roof is covered with two-ply tar paper and laid double on the valleys. The walls are covered with heavy quality building paper double lapped three inches, and the finish over all is best quality cedar shingles laid four and one-half inches to weather and fastened with galvanized iron nails. All external walls of the house have been packed with mineral wool.

Owing to the lot being a corner one, it



THE LIVING ROOM IS FINISHED IN CYPRESS TREATED TO A DARK STAIN.

was necessary to plan the house with really two fronts, and this has been accomplished nicely by means of porches or piazzas, which begin at one side of the house and extend in the form first

of a covered piazza, then an open terrace, and finishes around the end of the house as a pergola. The floor on the piazza is quarry tiles, and the terrace and pergola floors are of brick laid in fancy designs.

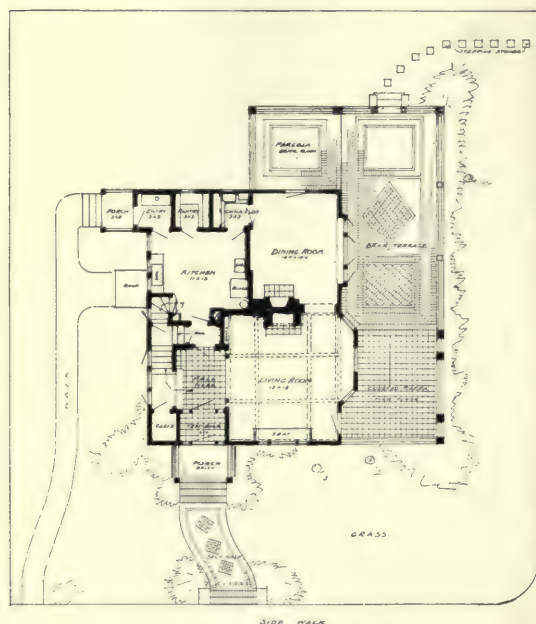


JAPANESE GRASS-CLOTH IS USED ABOVE THE PLATE RAIL AND TAPESTRY PAPER BENEATH.

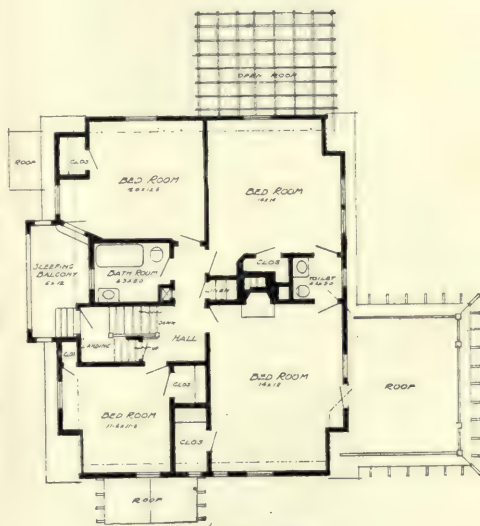
The short approach to the house is over a slightly winding brick walk, and the entrance porch has a floor of the same material laid in cement. The flat roofs of porches and piazza are covered with ten-ounce duck laid over one coat of lead and oil covered with four coats of the same. The house proper is finished with two coats of lead and oil, and all the exposed black iron work is japanned.

On entering the structure, one passes

high extends around room, and the ceiling is finished with exposed beams six by seven inches square. The wall space is covered with Japanese grass cloth similar in tone but of a lighter shade than the wood, and the ceiling is tinted slightly to blend in with the wall covering. One corner has been utilized for built-in bookshelves, and a fireplace inlaid with tile occupies a goodly portion of one side of the room. The two remaining sides are



First Floor Plan.



Second Floor Plan.

through a vestibule with tiled floor into the hall, which is finished in cypress stained dark. A coat closet leads from the left as does the stairway to the floor above. At the end of hall is a doorway leading through a vestibule to the kitchen as well as cellar stairs. The living-room is on the right of the hall, and its entrance is a large doorway dignified by square pillars. The room is about fifteen by eighteen feet, has quarter-oak floor, and is finished in cypress treated with one coat of dark stain and two coats of shellac rubbed down with pumice to a dull gloss. A paneling some four feet

devoted, one to a bay containing three windows, and the other to a cozy window seat. On the bay side there is also a glazed door leading to the covered piazza.

The dining-room leads from the living-room, is about twelve by fifteen feet six inches, has quarter-oak floor and standing finish of white wood, stained a dark olive, rubbed down. A plate rail five feet from the floor extends around the room and the wall space from the rail down is finished with battens two and three-quarters inches wide, the panels between these battens being covered with tapestry paper containing green figures

on a light ground. The wall space above the plate rail is covered with Japanese grass-cloth tinted to harmonize with the wood finish. At one end of room two panel windows and a glass door, which opens on to the pergola, give light and air. The dining-room is made still more bright and cheerful by window seat and three windows facing out upon the brick terrace. The fireplace, faced with ornamental tiling, completes a very attractive, harmonious room. The entrance to the kitchen from the dining-room is through the china closet, which contains the usual fixtures.

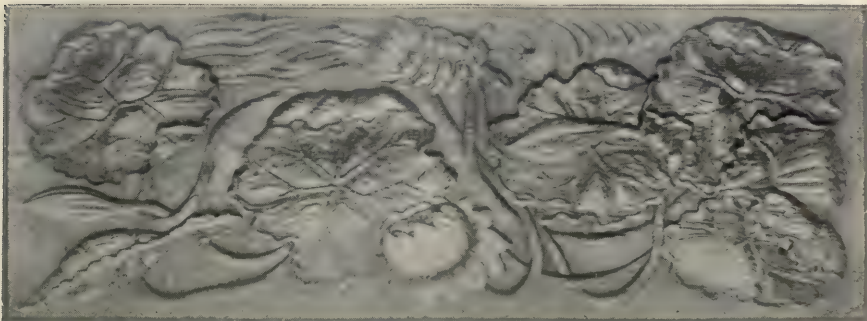
The kitchen is about eleven by thirteen feet, has an excellent floor of first quality maple, carefully matched in coloring at the joints and blind nailed. The standing finish is of North Carolina pine, varnished, and a three and one-half foot dado extends around the room. The walls are smooth finished plaster, painted. Three windows afford ample light and ventilation. The pantry off the kitchen is well supplied with drawers and cupboards. The rear vestibule or entry contains the refrigerator, which has piped ice-water outlet.

The floors in the service portion, aside from the kitchen, are of rift Alabama hard pine with standing finish of North Carolina hard pine, varnished. Stairs go from the kitchen to the floor above, the same stairs system being used that ascends from the hall, the two approaches meeting on a common landing part way up.

The second floor contains four rooms, a sleeping balcony, a bath with a tiled floor, two toilets, a linen closet, and ample clothes closet room.

The Cost.

Mason work	\$650.00
Carpenter work	3,700.00
Plumbing	450.00
Heating	200.00
Painting	300.00
Light fixtures	150.00
Papering	125.00
Tile work	325.00
Screens	100.00
	<hr/>
	\$6,000.00
Architect's commission	600.00
	<hr/>
Total cost	\$6,600.00



Building More Fireproof Homes

By P. D. Van Vliet



IS IT not time that the fireproof house receive greater consideration on the part of architects and owners? It so happens that a fireproof house is also one practically free from deterioration. There are no rotting timbers, and coal bills are generally lower than with cheap, inflammable construction.

But it is generally thought that fireproofing entails great expense, that any of the accepted safe materials are beyond the purse of the average home builder. That this is not the case is being proven by numberless examples of fireproof construction now under way, after designs of architects who understand how to keep costs down.

At the Chicago cement show held last January, one of the most interesting exhibits was that showing a typical suburban home in full size and built entirely of fireproof materials. It was a true concrete house, concrete hollow tile having been used for wall and floor material, and a stucco coat having been applied for the finished surface.

It is commonly believed that a coating of stucco on a good frame renders a house fireproof. This is not the case. The thin protecting shell is no protection from fire within and its life is limited. But true fireproof construction with approved materials gives perfect security. Stucco on such a foundation is ideal.

As a matter of fact the house at the cement show was necessarily built only in part. The depth of the booth being 14 feet, the porch, porch roof and the front wall of the house, including a bay

with casement windows off the living room, a casement window off the hall and the entrance were all that could be actually constructed. The balance was painted on canvas by one of Chicago's theatrical scene painters and gave in prospective, not only the house, but a typical suburban setting.

The roof of the home is an important feature that is seldom given sufficient consideration. Where houses are built close together the danger of fire being communicated from house to house is great, where wood shingles are used. There is perhaps nothing cheaper nor better than the wood shingle, if we disregard entirely the danger from fire, and yet this danger is so real today with our crowded city conditions that the makers of fireproof shingles, of cement-asbestos or tiles of clay or cement, are finding a ready market.

In order to carry out in every detail the purpose of the house a fireproof roof of asbestos shingles was used, and while its cost was found to be practically double that of wood shingles, yet this additional cost must be reckoned as a pure investment, there being no depreciation and the greater safety bringing a real reduction in the annual fire insurance costs.

The home owner should look well to the materials specified by his architect and used by his contractor when building his house. He should be sure that the walls are well insulated and preferably that they have a double air space, for this means a considerable saving in coal and a more comfortable house through the hot summer.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 412 F. E. COLBY, Sioux City, Iowa

B 413 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 414 G. N. MESERVE & G. E. ROBINSON, Boston, Mass.

B 418 KEITH'S ARCHITECTURAL SERVICE, Minneapolis

Design No.

B 415 R. C. POWELL, Dayton, Ohio

B 416 WILLARD C. NORTHROP, Winston-Salem, N. C.

B 417 A. M. WORTHINGTON, Albany, N. Y.

Design B 412.



Y the time this issue of Keith's goes to press, winter scenes like accompanying picture of design

B 412, will have passed for those more spring-like. How well suited is this house to the rigors of winter. Brick walls for first story and a substantial cement wall above. The pitch of roof does not allow the heavy snow to gather. Window casings are well protected from the northern winds.

This is a medium size house 30x34; the first story is 9 feet 6 inches and the second 8 feet 6 inches. The porch is wide and well supported by square brick columns and bricked up to porch rail. The dormers are double size, giving good, light rooms on third floor. The floor plan commends itself to careful study for it is exceptionally well arranged. Interior finish in oak, including floors. Bath room is tile wainscoted. Full basement; hot water heating and finished in this manner; built warm; is estimated to cost \$6,500.00.

Design B 413.

Here is a unique little cottage planned with strict reference to comfort and economy. The size is 34 feet 6 inches in width by 25 feet in depth. The main living room is 13x20 and has wide triple windows in front, admitting abundance of sunlight. This room opens at the end with wide, French windows onto a liberal piazza, 9 feet in width and extending across the end of the house. The dining

room back of the living room and connected with wide opening, also opens out onto the piazza in the same manner. There is one large central chimney with flue for heating plant, kitchen and separate flue for the large central fireplace in living room. The dining room is 12 feet by 11 feet; the kitchen is 10 feet by 9 feet and is provided with convenient cupboards. The main stairway extends up on the right side from the vestibule entrance and beneath are the basement stairs with grade entrance.

The second floor has three medium sized chambers, well provided with closets and two of the chambers connecting with a small sleeping porch 9 feet in width by 11 feet in length. There is also a good bath room over the kitchen, a linen closet, hall closet, etc. It is estimated to build this house exclusive of heating and plumbing for \$2,500. The roof of this cottage is kept low and the stories low, first story height being 8 feet and second story 7 feet 8 inches. The roof is brought down low in front with wide overhanging cornice, the projection being 3 feet.

The exterior walls are covered with metal lath and are given two coats of cement stucco which is brought down to the grade line with a rough "pebble dash" finish. The cornice is simple and consists of wide fascia board set beveling on the ends of the rafters, the latter to show on the underside, all of the cornices, casings, etc., left rough and stained. The

roof is shingled and may be stained brown or red. The interior casings are made very light with small amount of woodwork showing, three panel doors and all stained with one coat of dark mission stain. The floors are of natural birch.

Design B 414.

A simple, plain and clean-cut house of Natco Hollow Tile for the outside walls. It being another of the designs submitted in competition to the Brick Builder for a \$6,000 Hollow Tile house. We estimate that an expense of another thousand dollars would make this home fireproof.

There is no sign of fancy work, for even the dormer in the roof, which is so often seen in this type of a low hipped roof house, has been omitted and still we have a very pleasing effect. Note the odd pergola entrance with rough sawed timbers and clinging vines forming a covering from the heat of the noonday sun.

The tile walls have a coating of tinted cement plaster; the foundation walls are concrete with complete laundry and hot water heating plant in the basement. The living room has an open fireplace with a central chimney so that the kitchen range can use the same chimney. There are four good chambers and a dressing room besides a bath. Hardwood floors throughout with hardwood finish in the principal rooms of the first story, kitchen and entry in yellow pine stained natural. Balance in pine for painting. Tile on porch and entrance floors. A design well earning the distinction given it in this contest.

Design B 415.

A substantial, well designed double house. From the exterior one would never think that this was a house for two families. It is frame, finished with stucco on metal lath and has a tile roof. This duplex has a single entrance in center. No porch steps, but you enter at grade into a vestibule and then up five steps to laundry.

Each apartment contains a large living room 15x19 with open fireplace, a library, dining room with window seat, a kitchen with built-in cupboards, rear porch and entry, besides a separate front porch reached from living room through French doors. On the second floor there are three good chambers, the front one with fireplace and bay window and two closets. Besides the chamber is a sewing room, bath, linen closet and a large attic to be used in common.

There is a full basement containing separate heating plants, laundry, fuel and vegetable rooms. Oak floors throughout with red gum finish stained mahogany for the first floor. The doors have solid mahogany panels. The finish on the second floor is pine, enameled white with window sills and shoeing around base and the doors are stained mahogany. The stairs have oak threads and mahogany risers, the balustrade is white enamel with mahogany hand rail.

The cost complete, including heating and plumbing, is placed at \$9,000.

Design B 416.

An all shingles design well adapted to a corner lot. The shingles are stained brown with trim painted white, giving a good contrast in the color scheme. The house was built in the south, thus accounting for the large number of fireplaces, it being intended to heat by fireplace, and no heating plant is called for though one could easily be installed.

The large living room, 15x23, has a bay with window seat, fireplace at end of room and a French door leading out onto living porch on the rear.

On the second floor there are four good chambers, a maid's room and two baths. There is a full basement with stone foundation, laundry, fruit and vegetable rooms. Hardwood floors throughout, with hardwood finish in the main rooms on first floor; balance in pine to paint.

Estimated cost \$5,500.00.



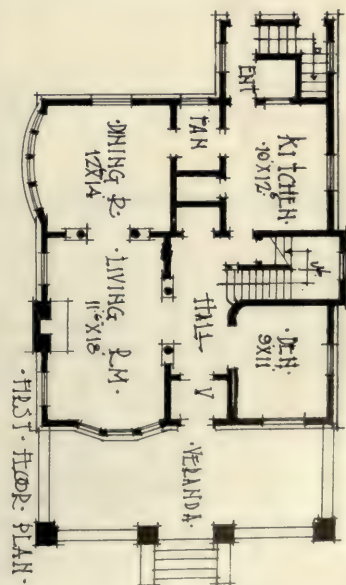
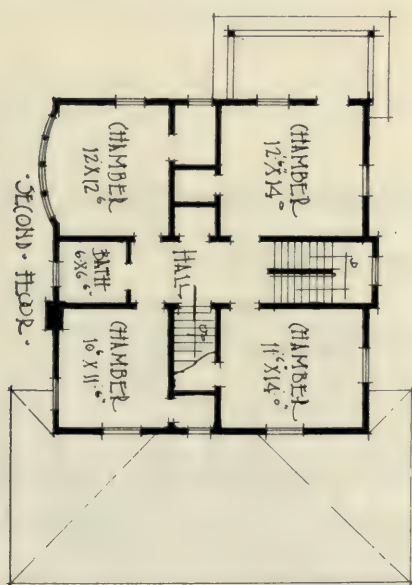
DESIGN B 412

Northern Home Where Snows Lie Deep

Design B 417.

In this design by A. M. Worthington, we have quite an imposing house in frame and cement plaster with half tim-

ber work in the gables. Brick for the foundation wall above grade and for porch piers. There is a wide columned archway between the hall and living room





DESIGN B 413

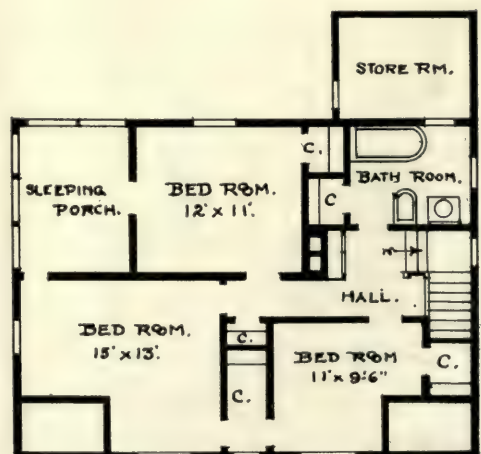
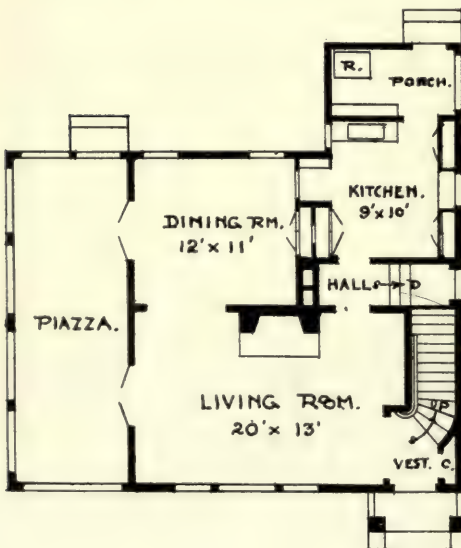
Unique and Economical Cottage

which really increases the size of the living room, which is 15x17 feet 9 inches. This room contains an open fireplace with seat each side.

To the front of the house off the hall is a music room, and from the opposite side a door leads to a library with a corner

fireplace. Steps from here lead down to grade entrance and toilet room under the main stair landing. The kitchen, pantry and entry are very complete.

The second floor has five bedrooms, a good sized sewing room and a bath. The closets are unusually large and plentiful.





Courtesy National Fireproofing Co.

DESIGN B 414

The \$6000. Prize Brick House

The plan has all the little features that help to make up the modern house of this Twentieth Century, including medicine cabinets, clothes chutes, etc. There is a large attic where a large billiard room might be fitted up, as well as two good servants' rooms.

There is a full basement containing a hot water heating plant, fuel and vegetable room and a complete laundry. Hardwood floors throughout with hard-

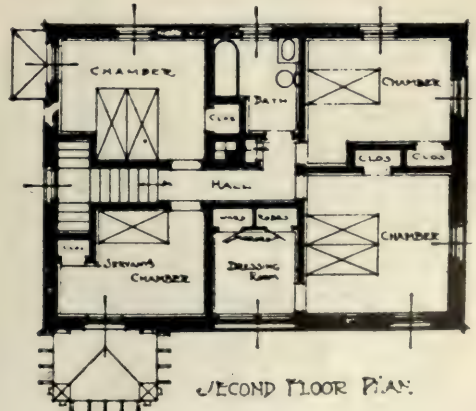
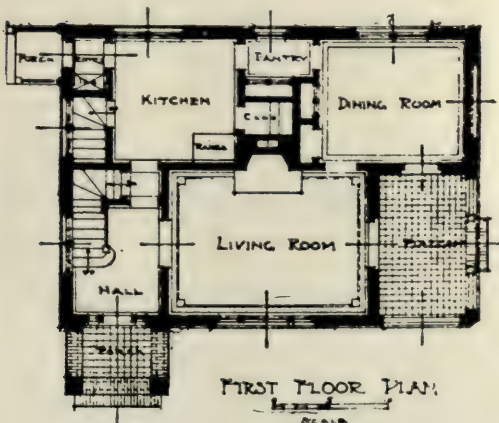
wood finish downstairs except kitchen, balance in pine to paint.

Estimated to cost complete, including heating and plumbing \$6,700.00.

Design B 418.

This design was built by C. E. Hoag of St. Joseph, Mich., in 1906 at a cost of \$1,400, afterward burned, and the owner was so well pleased that he rebuilt the same design in 1910 at a cost of \$2,000.

One could not find a more picturesque



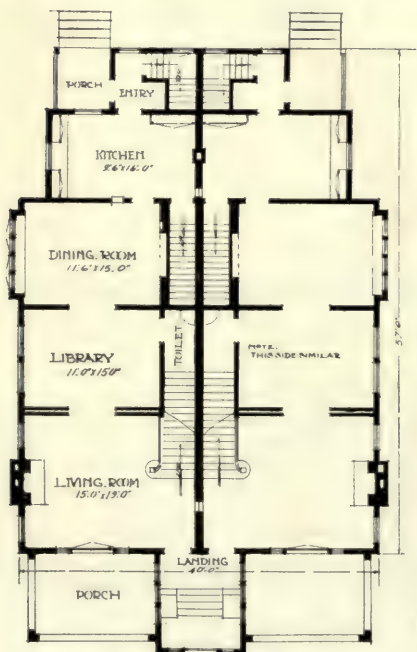


DESIGN B 415

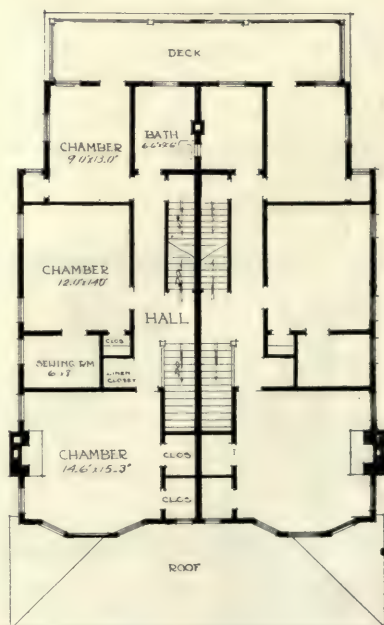
A Strictly High Class Duplex

suburban home than this inexpensive cottage set among trees with its spacious porch extending around the entire two sides. Did we say cottage? At a glance at the exterior, one does get this impres-

sion, but stop and look at the floor plan. There is a large living room 14x20 with octagonal tower full of windows and a seat underneath. A dining room with a cobblestone fireplace and corner china



FIRST FLOOR PLAN



SECOND FLOOR PLAN



DESIGN B 416

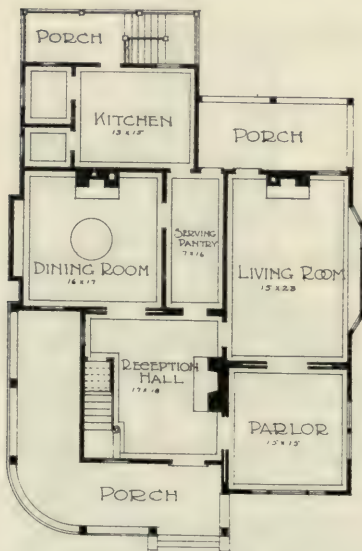
Good House for Corner Lot

closet, the two connected with only a wide cased opening between; thus the airy and spacious effect inside.

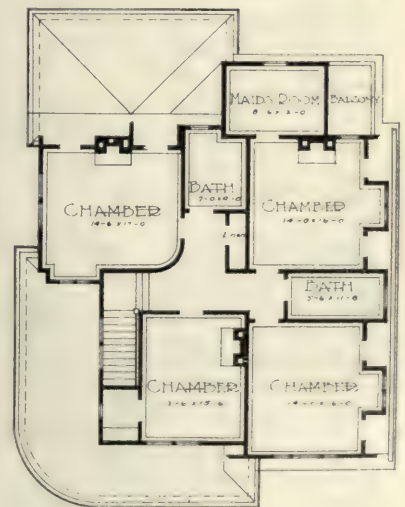
The kitchen has corner cupboards, hence the necessity of the pantry is done away with. Besides this there is a large

chamber and toilet space on the first floor and five chambers on the second floor. The one in the rear could be used for a bath.

The finish and floors throughout the first floor are pine stained and on the



• FIRST FLOOR PLAN •



• SECOND FLOOR PLAN •

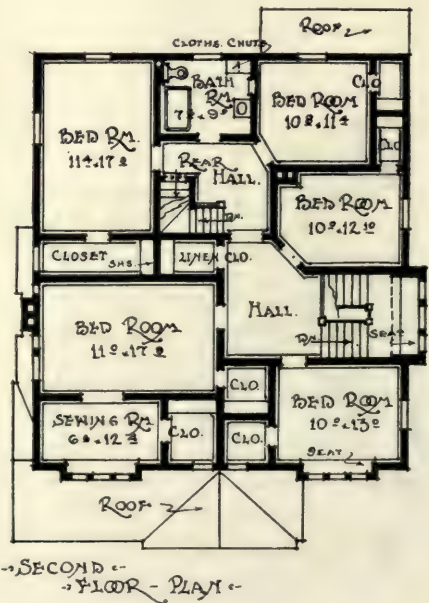
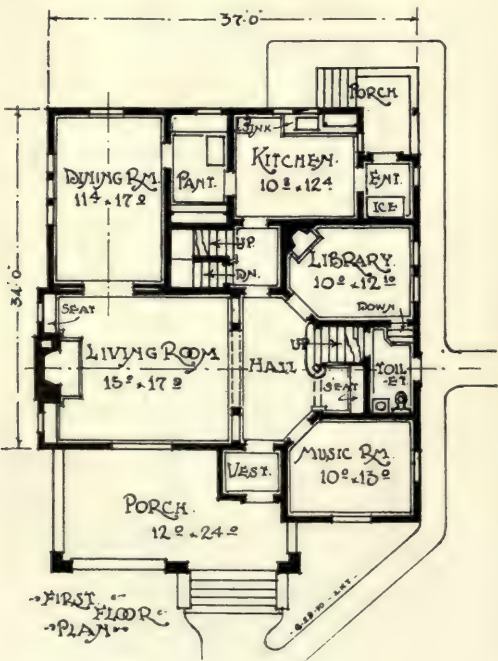


DESIGN B 417

Another Stucco Exterior with Paneled Work in Gables

second floor painted. Height of ceiling first floor, 9 feet 3 inches; second floor, 8 feet 3 inches. Lowest wall height 5 feet

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feet33
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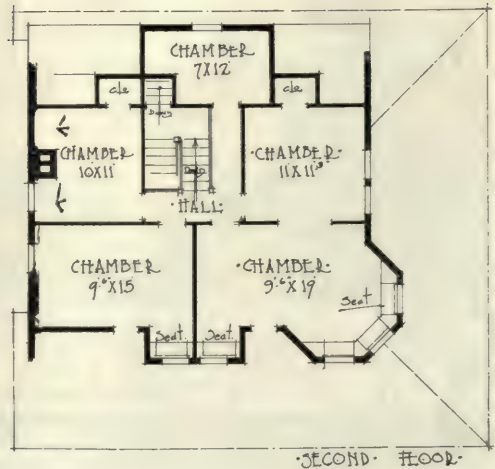
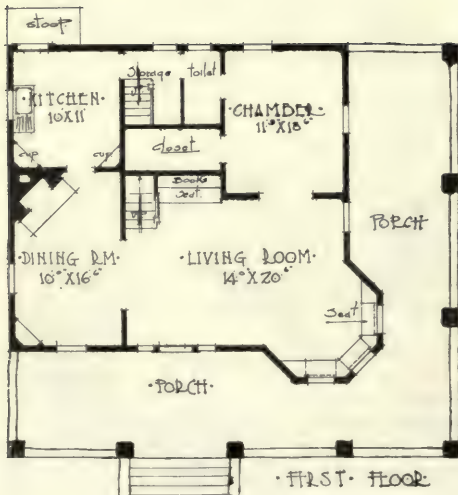
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DESIGN B 418

Picturesque Suburban Cottage

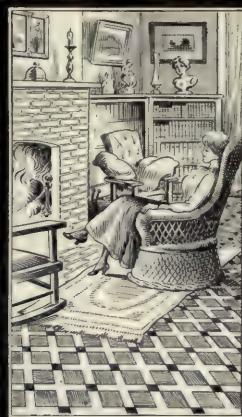


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Two Rooms or One?

HERE seems to be a tendency in the building of houses of a certain type to merge the dining room and sitting room into a single large room, serving both purposes with perhaps a small reception room near the door. The idea probably originated with the builders of bungalows, and is an admirable one as giving a single large and dignified room, in place of two moderate sized ones. Its success from the housekeeper's point of view depends a good deal upon the sort of family using the room, upon neighborhood conditions, and upon the time schedule. With a family of irregular habits, or of several small children, the arrangement is apt to result in general untidiness. In a sociable neighborhood, given to running in at all hours, there are manifest objections to eating in the living room, and these are emphasized if the hours of the family differ from those of the neighbors. So the matter of uniting the two functions in one room is a matter of application rather than theory. In the city apartment, where there is a room back of the parlor, separated from it only by a grille or by hangings, the use of this for a dining room is an excellent plan, as it secures a large light room further back for use as a bedroom.

Suppose, however, that the combined room is an actuality, how shall it be decorated and furnished so as to harmonize with both purposes? Naturally the arrangement of the furniture must be such as to separate the room into two parts, one end for dining, the other for the other occupations of life. And the furniture of the latter must be of a sort that will harmonize with the dining table and chairs. You cannot have mission dining room furniture and brocade-covered mahogany

chairs—and couches in intimate association. On the other hand, you can get furniture for the dining room end which is not distinctive. You may use for a table one of the swing top affairs, which are table or settle at need. The best are those with circular tops, about forty-four inches in diameter. They have a box under the seat in which doilies, napkins and small silver can be kept between meals. When a larger table is needed, two oblong topped ones can be used. Another device for small space is the drop-leaved table, either round or rectangular. The round ones are forty-four inches in diameter when opened, fourteen inches wide when both leaves are down. The rectangular ones are forty inches wide, forty-two long when open, and look much better when closed than the circular ones. The latter are a modern adaptation of what used to be known as pembroke tables. These tables can be had in any desired tone of oak, and would look extremely well with small rush bottomed oak chairs, not only in a dining room but in a library or a sitting room.

There is another sort of furniture which is adapted specially to small quarters—and to small families—the circular table fitted with three or four chairs, whose backs are rounded in such a way that they fit exactly around the edge of the table when they are pushed beneath it. The writer has seen them only in oak and she thinks wicker, but they may be obtainable in other woods. The price is about thirty-five dollars for table and four chairs.

The Sideboard?

Shall we have the conventional sideboard in the combination room? Preferably not. Something on the order of a cabinet will answer all the purposes of

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a sideboard and look much better. If the room is furnished in mahogany, one of the old secretaries with drawers beneath and shelves behind glass doors above will answer every purpose. With furniture of another type a bookcase could be utilized for the same purpose. Some of the Craftsman sideboards with the plate rail removed might be used in almost any room, and there is a delightful desk with several drawers which looks like a cabinet. With the fittings taken out, a single shelf put in their place and the leaf dropped at serving time, it would be a most useful adjunct.

Wall Treatment.

For the large room which has several functions a wall treatment is desirable which shall not emphasize its size. Unless it is abnormally low, the drop ceiling treatment is the most satisfactory, the ivory or gray of the ceiling carried down on the side wall about thirty inches. Then let the line of separation be a ledge or bracketed shelf which, at the dining room end can support an occasional plate, at the sitting room end pictures, casts or plaques. Below this the wall should be covered with paper in a neutral tint, golden brown, a warm tan, or sage green or possibly gray. The difference in exposure of the two ends of the room will probably make a more positive coloring impossible, but the neutral wall will be more agreeable if it is two-toned. There is an English paper of rough surface with a fine and very beautiful all-over pattern, worked out in lines of a tone darker than the ground, which is very satisfactory. It costs \$1.10 a roll, but is wide, and the quantity required with a deep drop ceiling is not large.

The Dividing Line.

In so large a room, something is required to mark the distinction between the two halves of the room, with their differing functions. It may be desirable to have a single large rug, and then one misses the very obvious division effected by the use of two rugs. A practical division is achieved by placing a long couch at an angle to the side wall of the room, leaving the dining room furniture all behind it. Another division, of more practical utility, in the case of the undesir-

able visitor just at a meal time, is a high and wide screen in four folds, which can be completely. Such a screen must be made to order, but is a delightful possession and be so spread as to conceal the table completely of infinite adaptability. If economy must be considered in its coverings, tobacco brown burlap is never amiss, with monk's cloth a good second, but with panels of tapestry or of mohair damask it becomes a thing of beauty and dignity.

Some Limitations.

In the effort to make an harmonious whole of two rooms of diverse functions, we must be prepared to make sacrifices. We must banish mere prettinesses from the sitting room end, we must dispense with some of the traditional ornaments of the dining room. The cut glass should retire to the closet, kept for use, and so should much of the silver. Candelabra, a fruit dish, a tankard, these are well enough, but brass or copper will be far more effective and appropriate. The conventional white linen centrepiece and sideboard cover should be dispensed with and heavy colored linen or crash substituted. And the same principle will banish pictures of purely gastronomic character, if indeed they are ever desirable.

A Recent Revival.

The last decorative revival is that of the taste for things Chinese, which belongs to Chippendale's early period, and is traceable in certain forms of ornament and construction in his later work. As Chippendale's Chinese pieces were few in number and very costly, the fashion is mostly confined to reproductions. The settees, chairs and tables are very beautiful indeed, with their combination of black and gold lacquer as well as interesting in their association with the art of the great cabinet maker.

For rooms furnished in this style are wall papers in Chinese designs, quaint animal and floral forms on deep cream colored grounds. One such room had a dado of old gold grass cloth below the figured paper, black woodwork and a Chinese rug in the typical coloring, brown, yellow and blue, with sill length curtains of raw silk in old gold a little darker than the grass cloth, and was a

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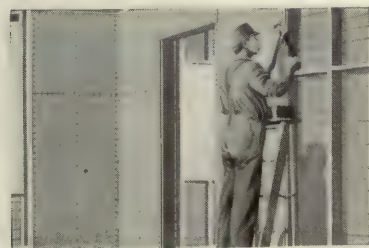
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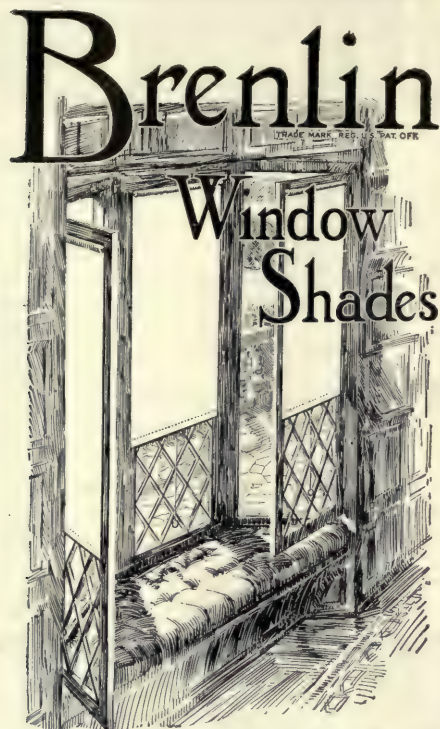
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charming setting for the black and gold of the two or three lacquered pieces.

Once in a while one is able to pick up a piece or two of lacquered furniture at a price not altogether prohibitive. Lost among a number of modern things they seem hardly worth while, but have possibilities when grouped by themselves in an alcove. An alternative to the old gold grass cloth is the same material in Chinese blue, and the curtains might be of that silky blue linen, also Chinese, which is so beautiful and yet so difficult to harmonize with one's ordinary possessions. Into this nook will find its way an occasional acquisition in the way of blue china, a porcelain vase with a note of plum color, a relief in gilded wood, or a bit of ivory carving.

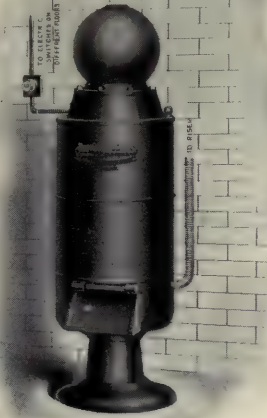
Lacquered Mahogany.

Another novelty is furniture lacquered in light colors and gold on mahogany. The models are on the Queen Anne order, chairs with high backs and curving legs and tables to correspond.

The whole piece is colored delicately, and a low toned apple green is charming for the purpose. Then the decoration, in gold, shaded so as to give an effect of relief, is put on and lastly the varnish. Such a table costs forty dollars, a chair thirty-five. Beautiful in themselves, such pieces are valuable also as suggestions to the amateur. It would be a capital thing for the cause of domestic art if some of the artistic taste—not talent—which is now employed in painting impossible flowers on china, or washy landscapes in watercolor, or dauby ones in oil, could be applied to purely decorative art. The trouble is that people are satisfied to be poor artists rather than artistic craftsmen.

Stencilling on Grass Cloth.

The writer lately saw a rather effective room whose walls were covered with tan colored grass cloth. Each wall was treated as a panel, and was surrounded, at a distance of about nine inches from its edges with a band of conventionalized roses and leaves in low tones of rose and green, stencilled on the grass cloth. As there were no pictures in the room, the border broke the expanse of plain surface very agreeably.



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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

* Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Interior Finish.

W. O. B. As a subscriber to your interesting magazine, I desire to take advantage of your Decorating and Furnishing Department for advice relative to wood-work finish on my new house, which will be ready for the painters in a short time.

Attached please find a pencil sketch floor plan with size of rooms, points of the compass, etc., indicated therein. Interior finish will be all in Southern yellow pine and it was our idea to finish the three bedrooms natural, using a paste wood filler, underlac, and good quality of light varnish.

We are very much pleased with the effect produced by the wood dyes and had thought that we would do the hall in bog green, particularly as we will use little or no furniture in the hall. The living room furniture is mahogany and willow and I suppose should be done in white enamel, although we would prefer to use the wood dye, if it would look well. The dining room is wainscoted to 5½ feet with plate rail and the furniture is dark oak, but we do not want to use dark oak for the wood-work, much preferring to using bog green.

The floors are yellow pine, 2-inch wide flooring, and will be done natural or possibly just a very light brown. Rugs are a mixed tan and green with no bright colors.

The kitchen is white tiling, 3-feet high, and will probably be done in white enamel.

Ans. We are in sympathy with your own ideas on the finish of your wood-work. Inasmuch as the exposure of your main rooms is North and East with the further shading of the veranda, we think the choice of the Bog Oak wood dye, an

excellent one, and we should carry it thru hall, living and dining rooms. The oak furniture of dining room will be entirely in harmony with this stain and the pieces of mahogany in living room will not be amiss, provided they are combined as you propose with pieces of wicker. We would stain this wicker with the same Bog Green and upholster it with cretonne, showing a good deal of tans and yellows mixed with green. To sandwich in a white enamel finish between hall and living room with wide connecting openings, would be very bad, indeed.

The dining room wall above the Bog Oak wainscot would be very effective in a paper which shows a deep frieze of apples and cherries in reddish tones with much green foliage on a greyish ground; the ceiling light greyish tan. We think with this scheme the floors would be best, first filled with Antwerp Oak Filler and then waxed or varnished. We approve of the white enamel for kitchen wood-work. We do not like a natural pine finish for bedrooms and would advise white or cream paint.

A Three-Story House With Low Lines.

C. A. "Enclosed you will kindly find a diagram of our home for which we desire information.

"I bought Keith's Book of Plans, Vol. V, to assist me in deciding upon a roof, but have failed, for I want a roof that will give the house a low appearance, but still have a billiard-room on the third floor. Could you make a suggestion that would help me out. Would light brick look as well as a dark tapestry brick, or is there a later brick out that I might have worked in? Also, what kind of windows would be best to give the house a low appearance or rather the bungalow effect?"



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Department B
NEW MILFORD, CONN.

Ans. You are asking the impossible; to design a house which shall have the low lines of a bungalow, yet have three stories, cannot be done. It is like asking a tall man to look short. On page 427 of our December issue is shown a very handsome design which has two stories and a storage attic, but preserves the bungalow roof lines. Such an attic could not, however, be utilized for a billiard room.

In regard to the choice of brick, a light colored brick can never have the dignity of the darker brick, tho some of the grey brick and light brown are very attractive.

Low, broad or mullioned windows with many small panes are best adapted to the low lines of the bungalow type house.

We shall be very glad to help you with suggestions on your interior decoration when you have definitely decided upon your plan, but until then it seems like wasted effort.

Furnishing of Den and Bedroom.

F. D. H. I would be very grateful to you for suggestions regarding the furnishing of den and bedroom in our new bungalow. Both den and bedroom have fumed oak woodwork with cream ceilings; den tinted light green and bedroom light blue.

The den is being used as bedroom with bird's-eye maple furniture and brass bed. I would like to put this furniture in blue room and use green room for den, as originally planned. Do you think the above bedroom furniture would look well in blue room or should room be retinted some other color? If using blue walls what sort of curtains, draperies and rugs should be used? I had thought of cream scrim curtains with yellow flowered border and perhaps introducing old rose here and there.

Have mahogany piano which I would like to put in den; would this be in harmony with fumed oak woodwork and fumed oak furniture with green Spanish grain cushions, and would you advise using a solid green rug and green reading lamp in this room? I would like to keep this den strictly a green room, but am afraid so much of one color will be monotonous. I had also thought of using mahogany furniture with green cushions

in the above den but do not think mahogany so good for dens as fumed oak.

Your suggestions in the past have been a great help and I greatly appreciate your kindness and courtesy.

Ans. Your letter omits one important point, viz., the exposure of these rooms. It would be unfortunate if the den with green walls were located on the North or East side of the house. In any event, green is not a good tint for the walls unless it be a very dull shade. We fear, as you speak of "light green," that this is not the case.

The bird's-eye maple furniture will be entirely appropriate in the blue room, but we fear the light green wall is not suited to the uses and furnishings of a den or library. We should certainly prefer the fumed oak furniture in the room, but pianos are in a class by themselves and the mahogany piano will be all right.

Especially if Spanish leather be used for upholstering the furniture, should the walls be low and neutral in tone. We think you will probably need to retint this room rather than the other. We should not use yellow in the blue bedroom, but something combining rose tones with the blue.

Scheme of Decoration.

P. L. "I enclose a rough sketch of interior of house we are building and would be greatly obliged if you would suggest colorings for rooms.

"The hall is panelled with oak 3 feet, with base and top—no beams. What color would you suggest for walls and ceiling—paper or tint? Dining room panelled in oak 5 feet 6 inches; beamed ceiling. What above panelling and color of space between beams? Living room, 15x24, with an alcove, 15x8, practically one room; has large East and West windows. I have thought of grey for this room, leaving the buff shades for dining and hall, which have the colder, duller lighting, but would like your advice upon this matter; if grey, what color for woodwork and colors for rug hangings, etc. Have 3 pieces of mahogany furniture, with good lines, to be covered when color scheme settled.

"Which do you consider more artistic,



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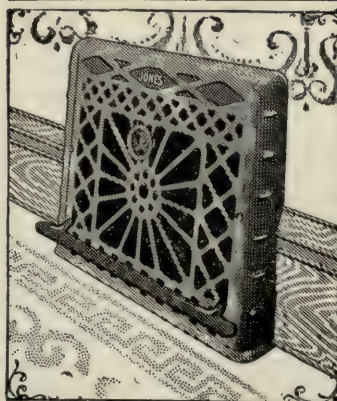
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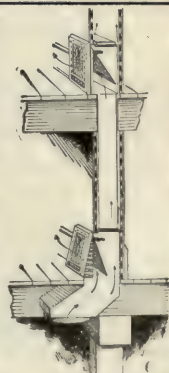
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open book shelves or glass enclosed cases, for living room?"

"I am also much in the dark about the electric lighting of the downstairs. I do not care for the large electroliers in the center of rooms, but please say what is best.

"I hope I have not asked too many questions, but I have noticed your many interesting solutions for perplexed homemakers during the past year and hope you will be able to help me.

"Do you advise bedroom woodwork in white, and what material for curtains, up and downstairs?"

Ans. Your interior finish appears to be very handsome and we think a fumed oak stain on the woodwork in hall and dining room would be an excellent choice. The fumed oak stain is a very soft and beautiful finish. We advise sending for booklet of Handicraft stains. We should use the same stain on all the floors of these main rooms, with a wax finish.

In regard to living room woodwork to be used with mahogany furniture, it may either have a mahogany stain or silver grey. A fine effect would be obtained by the silver grey with soft grey walls and mahogany furniture, with mulberry-colored rugs and hangings. The mulberry is a deep reddish rose, having a suggestion of mauve. The wall may be either tinted or one of the Tiffany blend papers in shades of grey used. In this case we should like a certain grey tapestry paper, having also mulberry and dull blue coloring on the hall above the oak wainscot. With a hanging of mulberry velvet in the opening between hall and living room, the effect would be one of quiet elegance and warmth.

In the dining room the browns and yellows you suggest would be most agreeable; also the golden grass cloth for the den on the second floor. We think white or cream usually the best choice for bedroom woodwork. In regard to curtains, we refer you to the very suggestive and helpful remarks on curtain materials in our August Decorative and Furnishing Department.

Referring to your question as to lighting fixtures, the large hanging center fixtures to which you refer are quite out of date. Side lighting is used wherever

practicable, from wall brackets. In large rooms, however, such as your living room, a center ceiling light must supplement the side lights. The most approved fixture is a plate of plain brushed brass from which depend short chains with the bulb and shade attached. A hanging center light over the dining table is also advisable, but there is tendency to a more simple fixture here rather than the heavy, showy domes which have been used.

Personally, our preference is for open book shelves; one seems to be on a more intimate footing with their books if one can reach around to them without first sliding a glass door. The leaded glass doors are, of course, more ornamental and afford protection.

Remodeling Old Rooms.

C. R. B. "I am contemplating remodeling an old house, the woodwork of which has been painted and about the only thing I think that can be done to it is to paint it white.

"My living room furniture is fumed oak and the rug a 2-tone brown Scotch Albion with a bit of dark rose in it. The Beloochian oriental rugs for the same room are in mahogany shades."

Ans. We agree with you that the best thing to do with the old woodwork is to paint it ivory or cream rather than pure white. The cream white will tone in with fumed oak furniture very agreeably and the dull rose color of your rugs will be admirable.

You have given no idea of the exposure of these rooms, but we would suggest for the living room one of the Tiffany Blend papers showing brownish tones mingled with rose and a hint of green. We would then emphasize the old rose in the other furnishings, such as a Morris chair with cushions in a rich shade of dull rose of Liberty velvet and some loose pillows covered with the same plain velvet and banded with antique gold braid.

For the dining room there is a paper in a sort of tapestry effect of brown foliage with yellow and rose tones scattered thru it. This would be excellent above a wainscot of plain terra cotta crepe paper or even ingrain, especially with curtains of madras having yellow and rose design on a cream ground.



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Scheme for a Bedroom.

J. B. L. "Will you please suggest a color scheme (especially wall decoration) for a bedroom 15x24, with southern, eastern and northern exposure, the furniture being circassian walnut?"

"Also a dining room 12x16 with northern and western exposure. This room is furnished in fumed oak and does not connect directly with the other rooms. It is in the front of the house and a 7-foot hall separates it from the living room.

Ans. With Circassian walnut furniture, the treatment of a bedroom should have considerable strength, as light dainty colorings do not harmonize with such furniture. It is, however, excellent for a family room and we suggest for yours either a tint of dull but not dark old blue for side walls, or one of the plain textile papers in that color. With either, we would use a chintz pattern border showing soft old reds and blues on a greyish ground and chintz hangings in similar coloring at the windows. The ceiling to be pale grey. The bedspread would be excellent made of pale grey seeded taffetas at 35 cents a yard and bordered with the flowered chintz. Garland rug with grey center and border in dull blues reds and dull green.

We would use grey tile for the fireplace facings and hearth. The cretonne draperies should be on the outer sides of the double windows only, with inner double curtains of white thin scrim or voile. We note there is quite an opening between dining room and hall shown on floor plan, and this should be taken into consideration in treating the hall.

For the dining room we advise walls of pale tan or ecru; grass cloth would be excellent, if not too expensive, or pale tan shadow-kona. Here the draperies may be either some of the beautiful but by no means expensive chintzes now so popular, or madras, introducing reds and blues on a pale tan ground.

Suggestions for Fireplaces.

A. F. "I am sending you floor plan and blue-print of elevations of the new house I am building, and wish to take advantage of your offer of advice and suggestions for decorating.

"The house plans provide for a brick

fireplace in living room, color of brick being left for owner's decision, and I would appreciate your advising where we can obtain illustrations in colors of the different bricks and tile for hearth.

"In case the information on plans and blanks does not enable you to form definite ideas as to our requirements I will be glad to send you any further information you might need, and am enclosing postage for reply by mail.

"Thanking you in advance for your kind help in this matter, and assuring you that we think this one of the most valuable features of your magazine," etc.

Ans. Under separate cover we are mailing you samples of wall papers, ceiling tints, wood and floor stains, with curtain suggestions for rooms requested. Samples of brick and tile for fireplace are sent you in brown and also in a greenish tinge; either will be correct. The hearth may be laid in the brick also and this would be our choice, but samples of tile are sent.

The different rooms are marked on the backs of the wall paper suggestions and the other samples are attached, so that you will have no difficulty in understanding them. In addition, we desire to say that considering the size of the rooms, the openings and the character of the rugs, it is advised to carry the same woodwork and finish thru all the lower floors. A change of wood finish takes away from the effect in a small house, and the woodwork in your hall and living room must be the same. Oak woodwork and a brown stain suits the style of your rugs much better than birch stained mahogany and as your furniture is mostly oak we advise using that finish as planned. The few pieces of mahogany will not look amiss, as we nearly always find a mixture of that sort.

A choice of wall color is sent for living room and either the green or the Tiffany blend in tans and green would be proper. Our own choice would be for the blended tan and green tones, especially with a rug so pronounced. In the dining room rug there appears to be quite a good deal of blue and we should advise emphasizing this tone in the wall and by draperies. The soft colors of the paper sent with the touch of plain blue velvet in hangings,



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The Shadow of Change.



OPE, says the poet, springs eternal in the human breast, and considering the large number of our subscribers who live in cities and many of them presumably in rented quarters, we must assume that their interest in the magazine is inspired by the hope of sometime building homes of their own. In the meantime they are subject to the inevitable impermanence of city conditions, and, especially at this time of the year, the shadow of a coming change of domicile must loom large to many of them. The economist too is urban, she too has known the bitterness of uprooting and she feels qualified to administer judicious doses of warning and encouragement to those about to change their dwelling places.

The Value of Forethought.

Nothing tells so much in mitigating the inevitable trials and difficulties of a flitting as a careful plan, made well in advance and committed to paper. The actual entrance of one's goods is attended by such confusion that it is next to impossible to decide as to their disposition intelligently. Therefore, one should have well in mind the disposition of the principal articles of furniture and have them accurately placed where they are to stay. To do this requires much previous planning and measuring but it is trouble well spent. For one thing, it save the floors tremendously, for another it enables you to utilize the strength of the movers rather than your own. Moreover the placing of most of the furniture on the day of moving simplifies the work of settling immensely.

Engage your movers long enough ahead to make sure of their arrival at an early hour. Seven o'clock is none too early to have the matter under way. Nothing is so detrimental to the condition of one's goods as the haste which attends their shifting at the end of the day. As to the choice of movers, unless one has had experience with some special individual, it is most satisfactory to employ one of the large storage companies. They have a fixed rate and a standard sized van load, and are expert in calculating the number of loads to be moved. They make a definite contract and hold to it and assume more responsibility about breakages than private individuals. If their price is a little higher per load, it is apt to be balanced by their closer packing.

The Process of Classification.

It helps wonderfully in the work of getting to rights if the smaller articles belonging to each room can be packed by themselves, in a box or barrel, and distinctly marked. If the bedding of each bed is made into a neat package, the mattress on the outside, it is a matter of ten minutes to make the beds. A help to the reestablishment of order is the packing of the china, silver and linen essential to the daily meals by themselves, leaving the things not in constant use for later unpacking. The same discrimination applied to kitchen utensils is helpful.

Half the difficulties of moving and house cleaning disappeared with the advent of bare floors and rugs. If floor coverings must be laid in the new quarters, they ought to be down before anything else is carried in, and here too



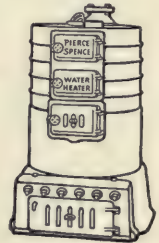
Residence of Mr. W. C. Calkins, Jr., at Flushing, Long Island. Frederick Squires, New York, Architect. A twelve room house exposed on three sides, with many casement windows, yet comfortably and economically heated with a Pierce-Spence Hot Water Boiler.

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comes in the value of forethought as, in the case of new carpets or mattings, the shops require ten days for making and laying. But it is one of the good points of the department store that it lives up to its engagements, and that ten days is ten days, not seven or thirteen.

Points On Packing.

One secret of packing is plenty of packing material, excelsior, paper and twine. The breaking of a single valuable dish or ornament is enough to counterbalance all one's economies in these essentials. The daily papers are invaluable for pictures, but excelsior is the thing for dishes and much less messy than sawdust, to which some people cling. When it is a matter of moving things on a level, dishes may be packed in barrels, but when taking them up and downstairs is involved, smaller receptacles are advisable, on the score of both humanity and safety. The heavy cartons of paper in which various cereals and other dry groceries are packed are useful for this purpose, if not too large, and clothes baskets and scrap baskets can be impressed into the service.

Books are one of the plagues of moving. They make so small a show on the shelves and take up so much room in the boxes to which they are consigned. The happy owner of sectional bookcases is spared a great deal of trouble in this respect. The most practical way of packing books is in small boxes, and the mover will bless you if you tack on handles of stout leather at either end. Books in good bindings should be protected by folds of stout paper, but for the others it is enough to wedge them closely into their boxes.

Pictures should be carefully cleaned and wrapped in abundant newspaper, folded well over the edges of the frames. Half a dozen of the same size may be tied together, with smaller ones fitted in between their opposite faces. And it is well to put all the bundles in one place in the new abode and leave the hanging of the pictures to the very last. The most satisfactory thing with which to hang them is not the twisted wire sold for the purpose, but copper wire, which is very flexible and easily cut and very nearly invisible against most walls.

Moving is one of the major tribulations of the domestic life, but it is a short if sharp passage as compared to the housecleaning of the last century, a torturing experience not to be forgotten by those of us who have endured it. It has its agonies but also its compensations, and there is a real satisfaction in getting rid of one's rubbish and being spick and span, if only for a time.

The Economy of Food.

An excellent book with this title has lately issued from the press of the Appletons, of New York, and it is to be commended to the ordinary reader, of no special scientific training, as an excellent statement of the essentials of the subject. It is a reprint of an English book, but is none the worse for that, as our cousins across the water bring to practical subjects a vein of common sense which we may well emulate. It is also interesting as giving the cost of various articles of food on the other side, showing that there is practically very little difference, and that if any in our favor.

The best feature of the book is the appendix of tables of the relative value and composition of the various articles of food, enabling one to see at a glance the exact amount of fat, proteid, and refuse matter in any particular cut of meat. With reference to the various vegetable products the available amount of carbohydrates is accurately stated. There are also careful analyses of the various food preparations for children and invalids.

It would seem as if the book ought to be very helpful to individuals struggling with the matter of nourishing a family adequately and at the same time economically.

The Economy of Food, a Popular Treatise on Nutrition, Food and Diet, by J. Alan Murray, B. Sc. New York, D. Appleton & Co.

The Kitchen With No Conveniences.

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tirety. Oyster boilers, éclair pans, potaricers are useful but not essential. But it is melancholy business getting on without a sink broom, a garbage drainer and a soap saver. Washing vegetables is nothing at all when done with a tiny scrubbing brush, and how much annoyance with messy soap is saved by having a hanging wire rack large enough to hold all three sorts, laundry, hand and scouring soap. And to the supply of small conveniences should be added an adequate number of right-angled brass hooks on which to hang them, one for each article.

The New Economics.

A recent writer on economic problems says that the question used to be asked, "How shall I save money?" but that the up-to-date housewife asks, "How shall I spend?" She recognizes that the best sort of domestic life is constructive, not destructive, not going without, but having the best there is, while buying it with the best judgment. The old economy diminished efficiency and enriched the doctor; the new economy balances increased expense by the saving on doctors and medicine. Six of one to half a dozen of the other, perhaps, but the half dozen is more rational and more agreeable than six.

One of Life's Little Difficulties.

Incident to the winter season is the preserve jar that sticks at the top and refuses to be opened by any amount of turn. In such an emergency the only thing to be done is to insert the tine of a steel fork under the rubber and pull out a bit of it. It is then an easy matter to remove the whole length of the band and unscrew the top. Information of this kind seems elementary, but the simple expedient is unknown to many people and may be to some of our readers. It may be argued that the can should have been so carefully filled that it wouldn't have stuck up the rubber, but the overflow of syrup on the rubber is rather a help in keeping the contents of the jar air-tight.

The Financial Limitation.

It requires courage to utter the words, "I cannot afford it," but to be able to do so is one of the elemental necessities. To

face facts, to balance income and outgo so that there shall be no deadly deficit takes a certain amount of moral courage, but is it not a courage which is largely directed against imaginary foes. Do we not attribute a false value to ourselves and our ways when we assume that our friends and neighbors are absorbingly interested in them? Does it really make any special difference to any one whether we have chicken and ice cream for dinner on Sunday, or eat roast beef and rice pudding? And has it not often happened to us, after a rigid maintenance of what seems to us the standard of living demanded by our social position, that we have noted some flagrant drop from that standard on the part of people much more eminent than ourselves? The writer once knew of a girl who was invited to supper at the house of a many times millionaire in one of our southern cities. She saved up her appetite, expecting unheard of luxuries. But the meal, served with splendor of silver and pomp of attendance consisted of tea, buttered toast and orange marmalade. Many such surprises await those who foregather with the rich of this world.

The Limitations of Time.

In these days when so much is said about the importance of long hours of sleep, it sounds like heresy to suggest shortening one's night's rest. But an extra hour in the morning means so much to the day, and once you think so it does not mean very much to the night. Getting up an hour earlier in the morning often means going to bed at night with just the healthy fatigue which insures unbroken sleep. The longest night is not necessarily the one in which we sleep the best. It is quite possible to spend a long time in bed without resting very well.

It is characteristic of most women that they muddle along any way, without much conception of time. Planning for a definite distribution of time is beyond them. And yet some emergency compels them to limit their work to certain hours and they can be as systematic as anyone. What we want to get at is the conception of time as an asset, not merely as a condition. Think of all the delightful things for almost everyone, if she only thinks so.

"The Beauty of the House Is Order"

There can be no such thing as order in the house that is continually being disarranged for sweeping, dusting and cleaning. Yet the dust and dirt must be removed;—cleanliness is even more important than orderly arrangement.



A California House Having a TUEC.

TUEC STATIONARY VACUUM CLEANER

By using the TUEC you can keep your house in perfect order *always*. It removes all the germ-laden dust and dirt without disorder or confusion. It thoroughly cleans every rug and carpet, every piece of upholstered furniture, every drapery and wall covering. It reaches into every nook, *under* and *behind* the furniture, wherever dust could possibly accumulate, and it carries the dust and dirt away through piping 2½ inches in diameter to an air-tight vessel in the basement. By keeping the house absolutely clean *all the time* the TUEC makes the *spring housecleaning unnecessary*.

There is a TUEC perfectly suited to the requirements of your home. It can be installed at any time and at a cost that is less than you would expect. **Let us tell you about it.**

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How few women really have leisure for putting things to rights and all that sort of thing the night before. That means that the house never looks really well, because dust accumulates in the night as well as in the day time and such a foresight is apt to result in doing things we miss by not having time for them.

I know that a great many authorities on domestic management recommend the things they care to do. And yet a certain amount of leisure is a possibility twice in the twenty-four hours. Most people, though there may be exceptions, are not inclined to set the house to rights between ten and eleven at night. It takes twice as long as when one is fresh and is not half as well done. But if you once give the extra hour in the morning a faithful trial, you will be astonished at the difference it makes not only in the amount of things you can do in it, but in the sense of freedom from hurry.

But not only is increasing the available amount of time a help, but it is just as much a gain to diminish the things that have to be done, or at least to simplify the way of doing them so that they absorb less time. Most of our cooking processes are needlessly elaborate. We make pies when puddings are just as good; we pare potatoes with great care when they might be cooked and served in their jackets and be quite as appetizing and more nutritious; we make ginger cookies when soft ginger bread is just as good and half the trouble; we bake cake in layers instead of cutting them from the cooked loaf as the French do; we cling to old fashioned pastry gravies, although no one really cares for them.

These are only a few of the ways in which most women waste time in cooking. Then we waste time in taking care of an endless amount of fussy little belongings. For instance, we multiply doilies. Some people feel it necessary to lay a doily under every ornament on a table. Five white linen doilies on one small mahogany table seems a good deal, when they are moved every time one dusts and must be washed frequently. The dining room and the bed room are the places for white linen. It will be a great stride in advance when the average

woman learns to desire a few good things rather than many ordinary ones.

It is, of course, easy to generalize, but there are as many applications as there are individuals. The great thing for each of us is to recognize her exact limitations and to accept them intelligently, regulating all the details of her family life in accordance with those limitations. Only as she does so will she make a success of her domestic life. It should be some comfort to remember that limitation of some sort is the condition of all human life.

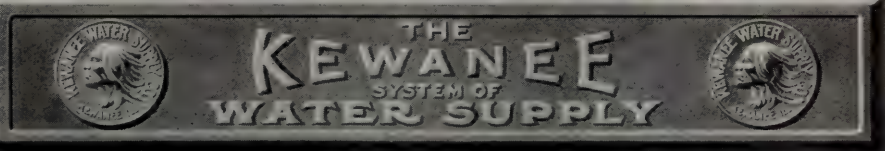
Emergency Preserves.

What shall be done when through absence or illness the summer preserving has been left out? There is the Women's Exchange with its superior product and the tinned fruit of the grocer. The one is good and expensive, the other cheap and nasty. Yet something in the way of preserves is a necessity in most families. Let us see what can be done with a can of the grocer's fruit, peaches or pears. Nasty is an unkind word to apply to it as the fruit is perfectly clean, generally of good flavor and shape. It is merely deficient in sugar. Drain off the syrup by courtesy and add to it a pound of sugar, less if you have not a specially sweet tooth. Cook slowly until the syrup is thick adding, if the fruit is at all insipid, the juice of a lemon. Add the pieces of fruit to the thick syrup and simmer slowly on the side of the range for an hour or more. It is as little trouble to do several cans at a time. The finished product will look more home made if the fruit is cut into smaller pieces. Pears are improved by an addition of lemon rind and crystallized ginger. White cherries are good with a little brandy.

Again, few people know how to make the best of the cheap and excellent evaporated fruits. They should be soaked until they can absorb no more water, and cooked slowly with plenty of sugar.

The English jams which come in glass jars and are sold very cheaply can be made more of by adding a cup of water and two or three tablespoonsful of sugar and boiling them up. Two jars of currant jam and one of raspberry with this addition are a good combination.

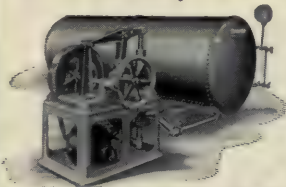
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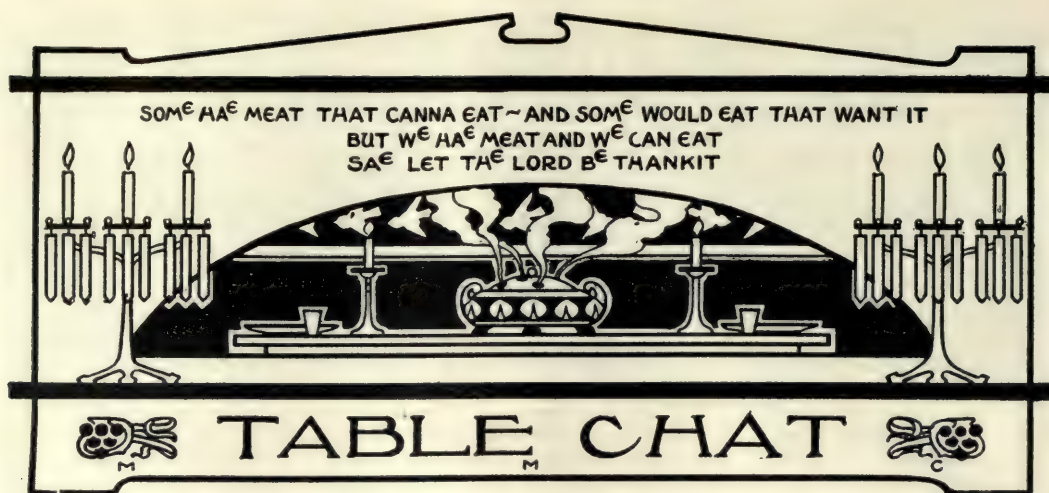
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CHOCOLATE SERVICE—BLUE AND WHITE JAPANESE CHINA,
BOWL WITH THREE FEET.

The Function of Color at the Table

THERE is a certain charm about the colorless table, set for a formal meal, with its spotless damask or heavy lace cloth, its shining silver and sparkling glass, its fine porcelain, whose white is only relieved by a line of gold or a floral decoration in delicate tints. But for everyday use a color scheme of some sort has its advantages. The deplorable thing is the table where there is a jumble of colors with no relation to each other. One recalls the harlequin services, so popular twenty years

ago, and the vogue of bright colored embroideries on white linen, when the same table boasted a centerpiece worked with pink roses, violets on the doilies under the bon bon dishes, and windmill designs in Delft blue for the fingerbowl doilies. We know better now, but many of us err on the side of an insignificant colorlessness.

You do not want a whole dinner service of positive coloring, unless it is something very choice. None of us would, I suppose, find fault with a service of Chinese medallion ware, of old blue Canton,

Will You Drive Six Screws To Save \$13.25?

It takes six minutes to drive these six screws. Now, if your time is worth more than \$2.21 a minute, don't read any further. This advertisement is for those who want high grade furniture at rock bottom prices, who love beautiful things in the home, who appreciate choice designs, know solid worth, and approve of a selling plan that saves them fully one-half store prices.

COME-PACKT Sectional Furniture is such Furniture. Take this table, for example. It is Quarter Sawn White Oak, with rich, deep natural markings, honestly made, beautifully finished, to your order, in your choice of eight finishes. Measure out its dimensions with a tape measure—compare it with any piece equally good, at any dealer's. It saves you more than one-half.

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Come-Packt price....\$11.75

Height, 30 inches; top, 44 x 28 inches; legs, 2½ inches square. Two drawers, choice of Old Brass or Wood Drawer Knobs. Shipping weight, 150 lbs.

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TABLE CHAT—Continued

or of the beautiful Dresden, which has an inch and a half wide border, of solid color heavily diapered with gold. And yet, would not any one of them, except, perhaps, the blue Canton, be better if bought for a single course instead of for a whole service? Some of the newest things from the foreign potteries show extremely beautiful designs worked out from suggestions obtained from Chinese porcelains, reflecting the taste for "chinoiseries," already noted in this magazine. But such elaborate decoration pall upon the taste when applied to a whole service.

and white table service. To give it emphasis you have a considerable choice, limited only by the prevalent tone of blue. Canton never looks so well as when it is relieved only by heavy and simple silver, but if that is not feasible there is a plain colored Japanese ware in grayish blue, to be had in quite a variety of pieces. With many of the blue and white wares dark blue Wedgwood, with its antique designs in white in low relief, looks well, while others compose well with the gray and blue Flemish stone ware. I have seen a table where the china in common use was



FRONT PLATE IN CELADON GREEN AND TEA POT IN GREENISH GRAY WEDGWOOD WITH CAMEO DECORATION IN WHITE.

The effect is heavy and barbaric. So it is good taste, as well as good economy, to have the greater part of our table service of a simpler sort, and to give it emphasis by the introduction of a few pieces of stronger color and more elaborate decoration.

"Blue for the Table."

"Blue for the table and green for the house," is a counsel that one often hears, and a very good one it is, with a condition added. It is not a good rule if you have a dining room papered in the vivid red, that has been so popular of late years, or if it is done in a verdure tapestry paper in blue green tones, as the pure blues of mineral colors and green blues kill each other. But, with favorable surroundings, there is everything to be said for a blue

white with the merest line of blue, which was wonderfully enhanced by an elaborate fern dish of Italian pottery in bright orange and dark blue, which looked equally well with the white and gold porcelain of gala occasions. When the main part of the service is the popular English willow there are satisfactory tea and salad services in blue and white Japanese china, very decorative and inexpensive. Of these, the fluted bowls, on three feet, are specially interesting.

I cannot leave the subject of blue and white china without a word about that most decorative of all recent stonewares, which comes from the Meissen potteries, and has a large conventional design of a single flower and leaves in the typical Meissen blue. Beautiful as it is, it is over-

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which explains all this and tells you how to materially reduce the high cost of living—how to have better, more nourishing food—how to keep food longer without spoiling—how to cut down ice bills—how to guard against sickness—doctor's bills.

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TABLE CHAT—Continued

powering for a whole service. If it tempts you, as it well may, get it in the large pieces and use it with plain white cups and plates. I have not had an opportunity of comparing them, but I am under the impression that the Berlin china, which has just a line of blue, would be harmonious.

A Caution.

I have said enough on this point to give the idea, which can easily be applied to other colorings than those mentioned. It should be borne in mind that it needs

a comparatively plain surface to relieve an elaborate design and that generally the foil should be of a stronger tone than the foiled. Often, too, the effect of the most exquisite table furniture is ruined by the flowers. How often do American beauties or scarlet carnations introduce a discordant note, in what might have been a subtle harmony with ferns and lilies.

A Suggestion for the Amateur.

China painting has doubtless had its day, and has been largely dropped from the courses of the art schools, where it was once so popular. The few who still practice it are artists, whose product is often worth more than its weight in silver, and finds a place in museums and cabinets of curios. But its materials are still attainable and there must be many who have retained the simple skill of laying an even coat of flat color. With this ability some charming things might be done along the lines suggested in this column. Might not some one achieve a tea service on thin china, deep rose, or apple green, or gray blue on the outside, deep ivory or French gray within, its only decoration bordering lines and monograms in gold or silver? Might not some of the old bits of "hand-painted" china, which look so hopeless, judged by the standards of today, take on a new beauty and use when painted over in solid color, to carry out and supplement the color scheme of the table service?

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YOU can still secure my assistance in designing the landscape scheme for your home provided you write at once, but don't delay.

BY my method I prepare plans for out-of-town parties at moderate expense. Write for my booklet today. It describes my methods and gives the prices and descriptions of the trees, shrubs and plants that I use, grown in my own nursery.

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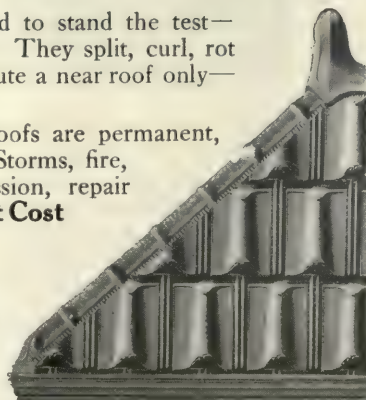
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Heretofore, you have regarded screened doors, windows and porches as *unsightly* affairs. That is because you have been using the old-fashioned, ugly, unsatisfactory *painted* screening. This year—before you buy *screens*—see Gilbert & Bennett PEARL Wire Cloth.

Its beautiful appearance will make you realize why owners of the handsomest residences in America have chosen it *above all others* for their homes. The very process that gives it the beautiful, pearl-like appearance from which its name is derived makes it *practically rust-proof*—consequently almost *wear-proof*. Two copper wires in the selvage identify the genuine Gilbert & Bennett PEARL Wire Cloth—*look for them*.



For Screening Doors, Windows and Porches

In addition to the regular grade of Gilbert & Bennett PEARL Wire Cloth designed for doors and windows, we make an extra *heavy*, extra *strong* grade of "PEARL" for porch and door use. See it before buying any other kind.

There is no comparison between Gilbert & Bennett's PEARL Wire Cloth and the common painted screens so universally used. "PEARL" is so much handsomer and so much less costly in the long run that you can't afford *not* to use it.

The best hardware dealer in your city sells Gilbert & Bennett PEARL Wire Cloth. To make sure of the genuine article look for the *two copper wires* in the selvage.

Or—if you prefer—write our Chicago office for samples and complete information.

Architects

Find out about Pearl Wire Cloth. Send us your name and we'll send full particulars and samples.



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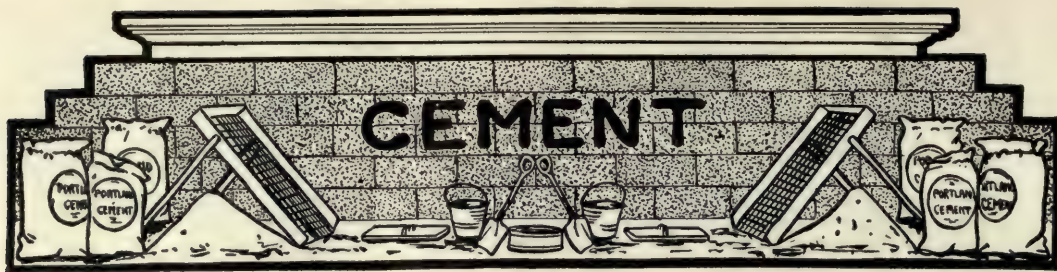
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Price includes our "Queen" Coal Grate with best quality enameled tile for facing and hearth. Gas Grate \$2.50 extra. Mantel is 82 inches high, 5



SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE.

(From "Small Farm Buildings," published by Universal Portland Cement Co.)

Specification A—1:2:3.

PROPORTIONS: 1 sack Portland cement to 2 cubic feet clean sand, to 3 parts screened gravel or crushed stone, varying in size from $\frac{1}{4}$ to 1 inch.

Materials required for 1 cubic yard of concrete: 1.74 barrels (7 sacks) cement, .52 cubic yards (14 cubic feet) sand, .77 cubic yards (20 cubic feet) stone.

Suitable for the walls and floors of tanks and other work requiring water-tight concrete of great strength; also sills and lintels without mortar surface.

Specification B—1:2:4.

Proportions: 1 sack Portland cement to 2 cubic feet coarse, clean sand, to 4 parts screened gravel or crushed stone varying in size from $\frac{1}{4}$ to 1 inch.

Materials required for 1 cubic yard of concrete: 1.51 barrels (6 sacks) cement, .75 cubic yards (21 cubic feet) sand, .89 cubic yards (24 cubic feet) stone.

For roof slabs, beams and columns sustaining great weight.

Specification C—1:2½:4.

Proportions: 1 sack Portland cement to 2½ cubic feet coarse, clean sand, to 4 parts screened gravel or crushed stone varying in size from $\frac{1}{4}$ inch to 1 inch.

Materials required for 1 cubic yard of concrete: 1.39 barrels (5½ sacks) cement, .51 cubic yards (14 cubic feet) sand, .82 cubic yards (22 cubic feet) stone.

For the body of concrete blocks, sills and lintels which are given a mortar surface, walls less than 6 inches in thickness, one-course floors and pavements.

Specification D—1:2½:5.

Proportions: 1 sack Portland cement to 2½ cubic feet coarse, clean sand, to 5 cubic feet screened gravel or crushed stone varying in size from $\frac{1}{4}$ to 1½ inches.

Materials required for 1 cubic yard of concrete: 1.24 barrels (5 sacks) cement, .46 cubic yards (12.4 cubic feet) sand, .92 cubic yards (25 cubic feet) stone.

For foundations and ordinary walls greater than 6 inches in thickness.

Specifications E—1:3:6.

Proportions: 1 sack Portland cement to 3 cubic feet coarse, clean sand, to 6 cubic feet screened gravel or crushed stone varying in size from $\frac{1}{4}$ to 2 inches.

Materials required for 1 cubic yard of concrete: 1.06 barrels (4 sacks) cement, .47 cubic yards (12.7 cubic feet) sand, .94 cubic yards (25.4 cubic feet) stone.

Concrete Chimneys.

Reinforced-concrete chimneys are least common and were introduced only about ten years ago. Information regarding them is meagre and they have hardly had time to demonstrate their durability. Ordinarily, they have inner and outer shells with an annular air space between. The shell thickness depends upon height, diameter, etc. The steel reinforcement is usually vertical bars with ends overlapping, spaced according to the size of the chimney. These bars are encircled by steel rings and are extended down into the foundation to insure a good anchorage. They are calculated to resist all pressure by the wind and any tensile strength in the concrete is usually considered an addition to the safety factor.

Foundations.—Logically, the first detail is the foundation and in its design must be considered any local building laws that apply. These laws usually



Dairy Farm Buildings owned by Henry A. C. Taylor, Newport, R. I. Roofed with Asbestos "Century" Shingles by W. H. Langley, of Newport, Contractor. Reproduced from an Artist's Drawing.

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"The Roof that Outlives the Building"

You gain four peculiar advantages by roofing with Asbestos "Century" Shingles.

They are the first practical light-weight roofing made of reinforced concrete.

They are absolutely fire-proof. Low insurance.

Unaffected by weather conditions. No painting—No repairing.

Their durability increases with age. Last forever.

Write for names of representative roofers who can supply Asbestos "Century" Shingles, and Booklet, "Roofing: A Practical Talk."

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specify the loads allowed in tons per square foot of area for ground of various kinds. Where the soil is very loose or sandy, piling is often necessary, but, regardless of expense, a solid, amply large foundation is imperative. Brick, stone or concrete may be used either individually or collectively. Concrete is commonly used for the subfoundation with brick or large stone above. The area of the foundation should be sufficient to prevent unequal steeling. It will receive greater pressure from above on the leeward side to the prevailing wind, resulting in a canting of the chimney if the foundation is not broad and substantial. The foundation should be such that wind pressure against the chimney will not unduly increase the load on it at any point.

To determine the stability of the chimney in relation to its foundation; first, find the greatest total wind pressure to which the chimney might be subjected and its moment about an axis in the plane of the base of the foundation; second, the total weight of the chimney, including its lining and also that of the foundation itself. The former divided by the latter will give the distance from the outer edge of the foundation, or the lever arm of the combined weight of the chimney and foundation producing equality of moments. If this distance is one-half the foundation diameter at the base, the chimney may be considered as just stable with no margin of safety; as it is lessened the factor of stability is, of course, increased.

This distance should never be more than one-third that across the base of the foundation even with the best construction and anchorage. In addition some strength will be obtained from the ground surrounding the foundation, but it will be too variable to be counted on. Evidently, the greater the combined weight of the foundation and chimney, the more stable will the whole structure be made.—*Canadian Engineer.*

Los Angeles Is Hollow Tile Mad.

In no city on the Pacific coast has there been such universal demand for hollow tile as in Los Angeles. In San Francisco most of the fireproof buildings have reinforced concrete floors and metal lath par-

titions. In Los Angeles the tendency is to use hollow tile in preference to concrete. They are even building residences of tile, and experts declare it is possible to build homes of this material as cheaply as wood. W. C. Denison, of Cleveland, Ohio, who, for several years, has given attention to the subject of the use of hollow clay tiles as a substitute for wood, writes:

"In communities where the proper kinds of tiles have been manufactured and the public informed as to the merits of this construction, it has been adopted with little short of wonderful rapidity. In Cleveland alone during 1911, 50,000,000 common brick have given place to tile. At the same time it has been demonstrated that it is nonsense to build a frame house when the 'hollow tile stucco' house (or tile faced with brick) can be built at practically the same cost and is far superior in every respect.

"Hollow tile is the coming building material for the country over. Timber is becoming scarce and suitable clay is abundant.

"Manufacturers of hollow tile claim that this material can be set up much more rapidly than concrete, and once in position, plastering and any other work can proceed without delay, while with concrete, the workmen are obliged to wait till it dries. Concrete is not suitable for partition work and metal lath and plaster are more likely to be affected by a hot fire than terra cotta tile, as the latter is subjected to the severest kind of heat in manufacture."

Keene's Cement.

I should like to know the composition of Keene's cement. Can you give me the analysis or tell me where to get it? G., Kansas.

Keene's cement is one of the group of hard finish plasters which owe their hardness and slow setting not only to being burned at high temperatures, but to the fact that they have also been treated with alum or other chemicals. Keene's cement is distinguished from the rest of this group not only by its quality, but by its method of manufacture. A very pure gypsum is calcined at a red heat and the resulting dehydrated lime sulphate is



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CEMENT—Continued

immersed in an alum solution, and after drying is reburned at a high temperature. After this second calcination the product is again ground and is ready for the market. The point must be emphasized that only the very purest gypsum should be used.

Small vertical kilns are used, charged with alternating layers of fuel and lump gypsum. Some experiments have been made in using rotary kilns, but they have proven unsuccessful. The calcined product from a rotary kiln is of such shape that it cannot be treated satisfactorily in the alum solution. A 10% alum solution is used.

The product is a fine white powder, slow setting upon the addition of water. When working this, even after hardening has commenced, the material can be re-worked with water and will still take a satisfactory set.

In regard to the analysis of Keene's cement consult the report of the Watertown Arsenal, 1897, which gives the following:

Silica (SiO_2)	.....trace
Alumina (Al_2O_3)	.....trace
Iron Oxide (Fe_2O_3)	.....
Lime (CaO})	.....42.04
Magnesia (MgO})	.....trace
Sulphur trioxide (SO_3)	.....56.54
Carbon dioxide (CO_2)	.....1.37

We recommend that you study Eckel's "Cements, Limes and Plasters," from which the above is summarized.

Hollow Tile for Cement Houses.

Hollow tile for cement plastered houses is so well understood it is only necessary to mention it briefly here. It was the demand of architects and contractors for something more durable than frame construction (lathed) or brick with raked-out joints that caused new patterns

of hollow tile to be made for plastered walls. The first requirement was that the clay itself should be impervious. To accomplish this the material is vitrified. Next, deep grooves are molded into the outside surfaces of the tile to provide a good mechanical bond between the cement plaster and smooth, vitrified clay. The result produces the best possible material for cement plastered houses.

No precautions for making plaster stick are necessary when building a hollow tile house, except the ordinary one of pushing it into the grooves. Undoubtedly this is one reason why architects and contractors are so inclined to adopt this construction for their plaster houses. Almost all that is necessary to secure a good job is to use good material in the plaster, applying it like any other plaster, —and it sticks. After the plaster is thoroughly set it forms a homogeneous plating on the outside which can only be removed by breaking the tile. Cement plaster does not slough from tile, because no dampness can enter the wall to cause tile to freeze and explode.

That this type of cement plastered houses has proved of great benefit to house owners is not disputed by any one. Owners who were formerly satisfied with painted frame houses because they knew nothing else, now realize the practicability of getting away from paint. They are led into building better houses,—educated to the point where ordinary construction means "cheap" and unreliable. This has been entirely brought about by conscientious architects backed by honest efforts of broad-minded contractors.

Cement plastered houses have come to stay. When properly built they are enduring, as many satisfied architects and contractors can testify from their own experience.—Chas. E. White, in Building Progress.

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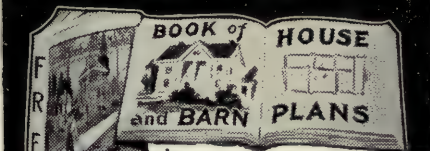
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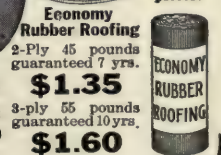
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Importance of the Priming Coat.



HE trend toward a simpler type of interior decoration which has been manifest for some time past has brought with it a wall finish of unusual beauty known as the Tiffany finish.

This finish derives its name from the Tiffany Studios in New York City, the well known designers of stained glass windows. Tiffany finish is obtained by the blending of various colors and when skillfully executed it gives a wall the appearance as though the light of a stained glass window were shining upon it.

It is especially appropriate in libraries and parlors, is frequently used in wainscoting a dining room, and is often used in banks and public buildings. Tiffany finish is soft and delicate and by its unobtrusiveness shows up the furniture in a room to good advantage.

The painter who is called upon to produce Tiffany finish has a delicate task before him and his success depends upon his ability to blend colors and upon the materials he uses. The best medium for obtaining this finish is pure white lead and pure linseed oil, as oil colors admit of beautiful blending.

To get the ground-work, mix the priming coat according to the following formula:

- 100 pounds pure white lead,
- 8 gallons pure boiled linseed oil,
- $\frac{1}{2}$ gallon pure turpentine.

This coat should be followed by two body coats mixed as follows:

- 100 pounds pure white lead,
- $1\frac{1}{2}$ gallons pure raw linseed oil,
- $1\frac{1}{2}$ gallons pure turpentine,
- 1 pint drier.

If a third or even a fourth body coat can be applied the work will be all the better. At least the last two of the body coats should be tinted to an ivory shade.

This may be obtained by mixing with each 100 pounds of white lead, 12 ounces raw sienna, 7 ounces medium chrome yellow, $\frac{1}{4}$ ounce lampblack.

The last of the body coats should be heavier than the earlier coats, and it should be stippled by tapping it while wet with a ball of cheese cloth.

For the finishing coat use glazing colors or lake colors, as they are sometimes called. These are purchased at the paint stores and require only thinners. The thinning down may be done either with raw linseed oil or with turpentine but the oil is preferable for the reason that it will leave the glazing coat more transparent as well as more glossy. Some painters use three parts linseed oil to one part turpentine. The reason the lake colors are used for this purpose is that they are more transparent than ordinary colors in oil.

The tints of the glazing colors selected will depend, of course, upon the tone of the finish desired. Greens, blues and yellows are the most popular for these purposes.

The clouded or mottled effect is obtained by rubbing out the glazing colors in sections so that the ground work of ivory color shows through more in those places than it does in other places. It will be noticed that by using only one glazing color a two-color effect will be secured; namely, the color of the glazing material and that color of the ground work where it shows through on account of the rubbing. In some work two or even three colors are used, being put on in the belts or patches and then rubbed together at the edges with cheese cloth so that one area or patch blends into another.

After the rubbing out is done the whole surface is again stippled with a ball of cheese cloth, or, much better, a regular

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PAINTING AND FINISHING—Continued

stippling brush. It is important that both the rubbing out and the stippling be done before the glazing color begins to set.

The process is simple enough when once understood but should not be attempted on any considerable scale without some practice on jobs where experimenting can be risked.—*Dutch Boy Painter.*

The Priming Coat.

The theory that anything is good enough for the priming coat has been exploded so often, and is so generally condemned by practical painters that it seems a waste of space to write about it; yet, there are many property owners, and, indeed, some architects who either through ignorance, or a false notion of economy, insist and specify material that is unfit because it is cheap.

The priming coat is the most important part of a job of painting. Like the foundation of a house, it is the structure on which all subsequent work rests, and, without it possesses certain dominant features, such as firmness, adhesiveness, affinity for subsequent coats, the job will be defective.

White Lead and Oil Best Primer.

Practical painters are agreed, says a writer in "The American Carpenter and Builder," that white lead and oil make the best primer for outside work. There is some difference of opinion as to how it should be mixed. Some claim it is best to mix it with equal parts of raw and boiled oil. Boiled oil has only one characteristic not found in raw. It will dry a little quicker. My best success has been with raw oil. Perhaps, if we were sure we were using boiled oil, it might be better, but, so much of the so-called boiled oil is boiled by the dealer adding turpentine japan to raw oil, that it seems better if painters would make sure of it by using raw oil and adding the dryer themselves, otherwise they are apt to get too much dryer, which often causes scaling. Dryer never did paint any good, and as a priming coat of lead and oil dries in a couple of days in warm weather, why use it at all? I prefer the primer without it. I am certain that paint hardened by the use of a dryer is not as tough and firm as when it is not.

Another View.

"We do not hesitate to go on record, that as the outcome of some fifteen years' experience with the testing of steel protective coatings from a practical standpoint, we are still of the opinion that properly and freshly prepared red lead in raw linseed oil, of proper consistency and when properly applied, as priming coat, and for second and third coats, a high oil carrying elastic paint containing as pigment a composite composed of 50 per cent lampblack, 45 per cent inert silicious material and 5 per cent red lead, ground in linseed oil and thinned to a proper working consistency with boiled linseed oil and japan oil, has given a service which has not to this time been equaled.—*Dutch Boy Painter.*

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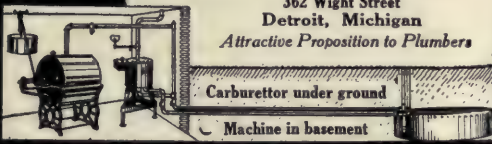
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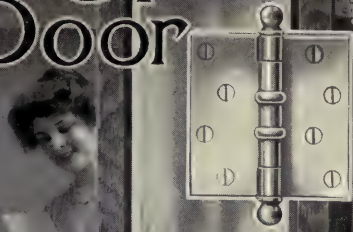
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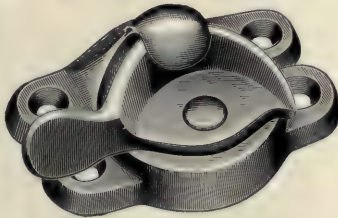
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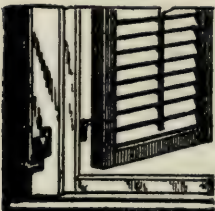
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Heating, Lighting and Plumbing

The Maligned Plumber.



HE plumber and the ice-man have been the butt of stock jokes for some little time; and, presumably, if these two purveyors to the public needs had existed in ancient times, the joke at their expense would be a classic. Thus far we have not discovered any attempt to clear the ice-man's reputation, but the plumber has found a champion in the June number of "Sanitation." This excellent little monthly, which deserves to be read far outside of the trade, takes exception to Mr. Charles Dudley Warner for making a joke at the plumber's expense. The offending paragraph occurs in "My Summer in a Garden," tells how, when the fountain pipe got stopped up, a couple of plumbers came out, looked the place over and then sat down and talked about it "by the hour." The next day they returned, but found they had forgotten an important tool; so one went back a mile and a half to the shop while the other sat and waited for him with "exemplary patience." At last they got to work, and dug up the whole garden very thoroughly before finding the obstruction, which was at the very base of the fountain. They dug "without any of that impetuous hurry which seems to be the bane of our American civilization."

Now as this "alleged" humor appears in a volume of "Higher Lessons in English," used in the public schools, "Sanitation" loyally protests against it, and claims that "the young of this country are being taught to look upon plumbers with suspicion and resentment." If, as "Sanitation" proceeds to state, "the large percentage of plumbers are industrious and painstaking," then there is a pleasant surprise in store for the "youth of this land" when the day comes for them to employ plumbers. An industrious and painstaking member of that craft would

be all the more appreciated by a mind that has harbored the opposite impression ever since school days. "Sanitation" need not take a gloomy view of the situation. If plumbers really are improving, they will live down these heartless jokes; even the mother-in-law joke is seldom seen today, and that undeserved slur, because of its hoary age, was much harder to live down than this upstart plumber joke.—*House Beautiful*.

Some Hints About the Furnace.

Having determined the amount of heat required for each room, and added it together for the total b.t.u.'s for the house, we must decide on the type and size of furnace to be used. There are two types of furnace in general use, the direct-draft and the indirect-draft. Either is more efficient in a brick setting than in sheet iron. The indirect is more efficient than the direct, but it must be thoroughly gas tight, and be provided with a direct cut-off damper, to be used when fresh coal is put on, or when it is desired to have the fire burn up more quickly. Every furnace must also be provided with a water pan of at least one square foot area, to add moisture to the heated air. An efficient furnace will utilize about 60 per cent of the heat units in the fuel, and as good coal has about 14,000 heat units per pound, and dry wood, net, about 5,800, there will be available for heating, with coal 8,400 b.t.u. and with wood 3,480 per pound. A good furnace with a good draft, on a cold day will consume five pounds of coal per square foot of grate surface per hour, which equals 42,000 heat units. We may then divide the total number of heat units required to heat the house in zero weather by 42,000, which gives us the square feet of grate surface necessary, and we must have a furnace with at least that area grate for coal.

The grate is an important part of the furnace, and the better one to have, is

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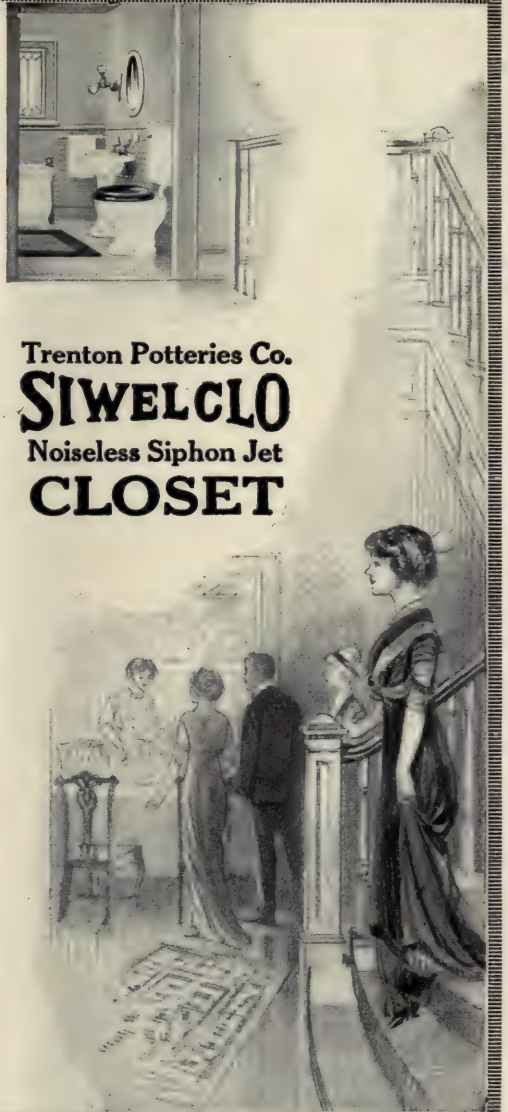
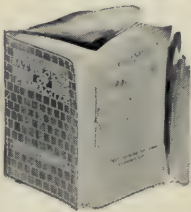
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The furnace should be located as near the center of the cellar as possible, so that the hot-air pipes may be nearly the same length and they should incline upwards from the furnace a little. The pipes leading to the windy side of the house, and to the first floor should be the shorter and larger ones, as the heated air flows more readily toward the sheltered side, and to the upper floors.

The cold-air box should lead from the windy and coldest side of the house, and is better made of galvanized sheet-iron, than of wood, as it is much tighter and cleaner, and only a little more expensive. It should be provided at the inlet with a galvanized iron wire screen of about No. 12 gauge, and about one-half inch mesh, and a sliding clean-out door in the bottom, just inside the screen and also a sliding cut-off damper. The area of the cold-air box must not be less than three-fourths the total area of all the hot-air pipes, otherwise the pipes leading to the upper floors will get the most of the heated air, leaving the lower floor insufficiently supplied. Each hot-air pipe should be provided with an adjustable damper located near the furnace.

Round pipes are the most efficient, but it is rarely, if ever, that round vertical flues can be installed, owing to lack of room in the partitions; they are therefore make rectangular in shape, but should never be less than three and one-half inches deep, and deeper if possible, to avoid friction. While the temperature of the heated air in the vertical flues, under proper conditions, will average 120 degrees F. it will be hotter than that when leaving the furnace, and it not infrequently happens that the furnace will be charged with fresh coal, the draft opened and then forgotten; in consequence the air becomes very much over-heated, and if proper precautions have not been taken in the installation, a fire will result. It is therefore essential that every possible precaution should be taken against fire in the installation of any kind of heating apparatus.



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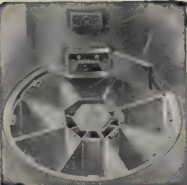
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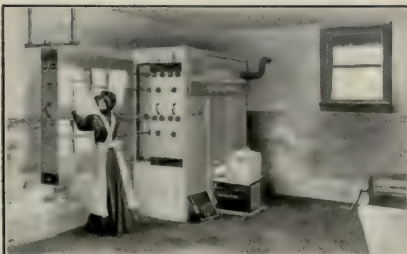
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SPLINTERS AND SHAVINGS

Sound Deadening.



ONE of the hardest things to accomplish in building construction is perfect sound deadening, Mr. Westwood writes in The Improvement Bulletin. During the last few years a great deal of attention has been devoted to the subject by technical schools and some of the architects and engineers. It seems simple, for we know absolutely what sound is and it would appear that there being no uncertainty as to the nature of sound and as to its conduction, no difficulty should be encountered in securing the deadening or killing of that conduction. There would seem to be several reasons, however, why so few of our buildings are successfully deadened. Perhaps the chief reason is that sound is transmitted through all rigid materials and it is absolutely essential to construct floors and partition walls of rigid materials. Another reason is that sound is subject to reflection and many materials used in building construction are excellent sound reflectors.

To deaden this sound conduction some soft non-vibrating material must be introduced. If the structure is of wood, the practice is to use a soft quilt or other pillow material, as near the source of the sound as possible. Care must be taken to see that there is a very minimum amount of vibrating connection between the vibratory mediums or materials. If used in wood floors, the material should go over the rough floor and then strips should be laid on top of the material and the finished floor nailed to those strips and not to the rough floor. Be careful that your finished floor—which is the original vibrating medium of the floor construction—does not come into contact with the wall studs or wall finish. What contact is necessary with the wall finish should be broken as far as possible. It is better, therefore, to turn the deadening material up on the face of the plaster or studs, past the level of the finished floor so that any sound which may come off

the end of the floor boards will die against the quilt, instead of setting up vibratory motion in the studs. It is better to deaden a floor from the top than from the bottom as the sound vibration is immediately reduced to a minimum before reaching the rough floor and the joists. In the undeadened joist floor sound is augmented by the reflection between the joists and between the rough floor and the plaster beneath it, so that it is quite possible to introduce into that space between the joists sound of 100,000 units of intensity which could augment itself to a million units of intensity by simple reflection, as in the case of the drum. Sometimes we find an effort to deaden by packing mineral wool or other loose fibers between the joists or by laying 1-inch strips over the rough floor and packing between the strips with such fibrous material. In either case the condition through the air spaces of the construction is stopped and if the packing be between the joists reflection is prevented. But there is still direct vibrating connection between the finished floor and the ceiling below, so that some soft non-vibrating material should be used to break that connection.

What has been said about floors applies with equal force to partitions. The theory that confined air is sound deadening is now accepted as a fallacy and we are appreciating that quite the reverse is true, namely: that confined air may act as a medium to augment the intensity of the sound by reflection between the confining surfaces.

One word about concrete construction, as that is coming into more and more general use. Concrete itself is a rigid material and when it sets, it is as hard as stone, but it is composed of a multitude of pieces bound together with a different material, namely, cement and sand, so that sound in going through concrete dissipates itself to a certain extent in passing through these various changes of material. Likewise concrete is without fiber in any definite direction and the vibrating

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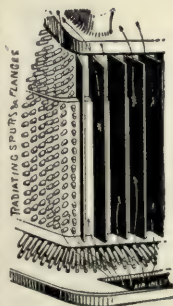
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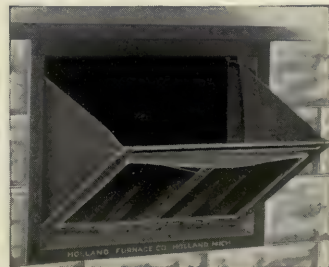
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wave is in every direction with equal speed and force. Also in the concrete construction there are no reflecting surfaces as in the joist construction, consequently there is no chance for augmenting the sound. It seems also that from the very rigidity of concrete the sound vibratory motion set up by the impact of the foot on the concrete is much less than with the suspended wood floor; however, what sound wave there is travels much faster in concrete than in wood and it is a much more perfect conductor. I find many architects and engineers contending that concrete construction is soundproof. This is not true and a careful reading of this paragraph will show the reason why so many have regarded concrete as non-sound conducting. It is a construction that should not be used for flat buildings or school houses without the introduction of some non-vibrating material, a number of which are manufactured by a number of different companies, and which are fireproof and practical for use in almost every condition.

Does An Architect Pay?

About twenty years ago a well-known Boston architect said to me: "The American people are just beginning to use architects." And his statement was true.

At the present time a very small percentage indeed of our homes, including farmhouses and tenements, are designed by architects, but the proportion is steadily increasing.

To a man who has but a few thousand dollars to put into a cottage or bungalow, the usual fees which a well-qualified architect must demand for that class of work seem almost prohibitory. Yet the cost of maintaining a down-town office in a large city is so high that only a young architect can afford to do much work of this class. You cannot get the direct personal touch of a first-class experienced architect, whose work embodies taste and individuality, and who will carefully provide for every detail of your practical requirements, unless you are willing to pay him a fee of eight or ten per cent of the cost of your building. There are, however, so many people of modest means, who want something better than the house usually designed by the average architect-builder,

and the tendency among young architects of talent and good training to locate in the big cities to the neglect of smaller towns is so strong, that a great demand has arisen for inexpensive "stock" working plans for small houses.

If you wish to build a very small house and wish to build it with cheapness in price as the main desideratum, a country builder working from his own plans can give you more as to quantity than you would get from the plans of a good architect.

Good house building is a very practical, as well as æsthetic undertaking, and in choosing an artist to design your house, you should know that he has a good technical knowledge of building, and is a good practical handler of construction.

If you reside either in a great metropolis or in a small town, your opportunities for direct familiarity with the residence work of the different architects may be limited.

The best way to become familiar with the work of many architects is to begin, long before you build, to subscribe to the journals, particularly those published for the profession and which illustrate the work of the best men.

Most architects who specialize, in residence work (and this class of building is rapidly becoming a specialty) will be pleased to show you in their offices photographs of what they have done and sketches of what they would have liked to do, without placing you under any definite obligation. As compared with lawyers and doctors, architects, as a rule, are "easy marks." There is not one in a dozen who has the hardihood to look at his watch the moment you begin to ask him questions as to the sort of house he would suggest for your property.

Sliding Doors.

A sliding door properly installed is a thing of beauty and a source of satisfaction and convenience for all time, and if crudely or improperly constructed, it is the most unsatisfactory, the most aggravating and disagreeable, the greatest nuisance and the worst temper and religion tester ever conceived. Nothing grates on the nerves worse than a sliding door dragging part or all the way, producing a sound like squealing and grunt-



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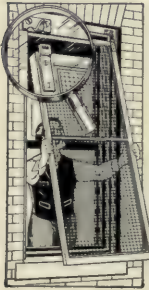
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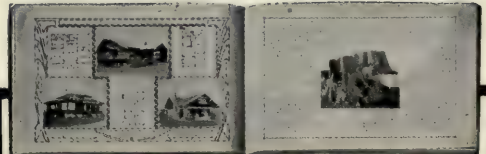
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SPLINTERS AND SHAVINGS—Continued

ing in a high pitch, and with the strength of a fog horn. Also, if not properly constructed, it will serve as an abode for mice or it may serve as an inlet of cold air in winter time, and become a nuisance in that way, so we see there are several things to consider when we put in a sliding door if we would please our customers, and a carpenter who is in the habit of doing his work in a slipshod way has no business putting in a sliding door.

There are two kinds: those having rollers on the bottom and sliding on a track on the floor, and those having the rollers on top and rolling on a suspended track, hanging clear of the floor. These are again divided into two classes, the single and the double door.

The first mentioned kind, having the rollers and track on the bottom, are found mostly in more or less older buildings, and are somewhat out of date and have given way to the newer kind, a bad feature being the necessity of putting the track along the floor all through the opening, making a very unsightly job, also the fact that the wheels or rollers would wear with considerable usage on the bearings until the door would drag on the track. I was called upon sometime ago to look into the antics of one of these old-timers. It would neither roll nor slide, but when coaxed very strongly would jump up and down like a scared broncho. After a thorough investigation I diagnosed the case old age.

Since we have not decided that the door

with rollers and track on the bottom is out of date, we will pass it up and take for our consideration the sliding door that rolls on the top.

One thing that people should be educated to is, where there is no heating plant, there is an uneven temperature in adjoining rooms having a sliding door between them. Never leave the door partly open in cold weather; if you do it is bound to draw towards the heat and give trouble a plenty. It should be either open all the way or tightly closed.

While the general construction of sliding doors with this style hangers is about the same, yet there are some things to be considered; one thing is, in wider openings we will have to use stronger headers, 2x6 inches or 2x8 inches doubled, set on edge, and where there is an extra heavy weight to carry it may be policy to truss over the opening, doubling the first studding up to header. In a case like that it is proper to set the studding edge-ways on both sides and not on one side only, as I have seen it done.

Of the two kinds, single and double doors, I prefer the single and advocate its use if the space will permit, because there is less chance for complications on account of doors warping, building settling, or some discrepancy in the fixtures. I have hung doors as wide as eight feet, single, which never gave trouble, while I have had all kinds of trouble with double doors not more than two feet each.—*National Builder*.



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New Booklets and Trade Notes



AMONG the many little trade booklets that have been received by us of late is one, "The Cement User," which naturally deals in the use of, and the value that cement is being put to, not only by the contracting firms who are daily taking large contracts for erecting mammoth office buildings, like the new Woolworth building of New York City, but the farmer, the home owner, and the smaller user of concrete.

It states, in an interesting article on "The Farm of the Future," that nowhere has the use of concrete developed to such a marked extent as on the American farm.

In the West particularly, it would indeed be unusual to find a farmer who has not used concrete for some purpose, if not in building a foundation or a feeding floor, or in laying a walk, at least in making some of the small repairs about the home or out-buildings, which become necessary from time to time.

Several small photographs are shown to illustrate the use that concrete is being put to on the farm, such as the garage, the concrete wagon and implement shed, milk house, chicken house, corn crib, granary, etc.

The owner of one of the corn cribs here illustrated, says since its construction in 1911 it has effected a saving in corn which approximates 1-3 the cost of its construction.

In four years more this saving will equal the entire cost of building the corn crib, and meanwhile the owner has besides, all of the advantages offered by a crib of this type, cleanliness, safety from fire, permanency and no maintenance or repair expense.

It is claimed that it takes \$1.00 per annum to feed the city-bred rat. 60c is ample to maintain one of the country-bred variety during a similar period. A conservative estimate of the number of rats on a farm is one to the acre, so that the farmer who is not yet the owner of a rat-proof corn crib may readily ascertain

just how long it will take to repay the cost of building one. This cost may be somewhat reduced by the use of traps, poison, dogs, ferrets, and cats, but to eradicate the rat, rat-proofing is necessary and rat-proofing means concrete construction.

* * *

All of us were not as fortunate as those that were able to attend the interesting and instructive Clay Products Exposition in the Chicago Coliseum from Feb. 26 to March 8. Everything from the simplest piece of terra cotta, roofing tile or garden pottery to the finished product, a prize cottage or bungalow built of brick and tile.

With the advanced price, owing to the scarcity of lumber, we must look for a new building material. Why not brick, cement and hollow tile, for "by frost, nor fire, nor flood, nor even time, are well-burned clays destroyed."

* * *

How many of our readers have ever taken advantage of the generous offer that the decorative department that Sherwin Williams maintain for the use of the general public to assist in the correct use and harmonious color scheme that may be obtained by the use of their materials? We have before us a copy of the Colorist, a little publication gladly sent on request.

* * *

A little booklet, "Grading Rules," by Maple Flooring Mfg. Association, is free to anyone interested.

* * *

"Expanded Metal Construction" is published monthly by the N. W. Expanded Metal Co., illustrating metal lath and reinforcing for cement users.

* * *

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ing. This concrete hardener, as it is called, is finely ground and extremely hard, dense and resistant to abrasion, hence dust cannot gather as in the ordinary floors unless they are painted.

* * *

On the same order, but a trifle more extensive in scope, is "Building Progress," published by the National Fire Roofing Co., Pittsburgh, Pa., whose well known specialty is Natco Hollow Tile. "Building Progress" for November and December last contain some extremely interesting articles by well known writers, as for instance, Architects & Fire-proof Houses, by G. W. Hamilton, very finely illustrated.

* * *

The brochure of the Red Cedar Shingle Manufacturers' Association, Seattle, Wash., is an attractive booklet, containing photographs of a number of interesting designs carried out in this building material, as well as the Story of the Red Cedar Shingle, with full directions for ordering.

* * *

The Western Electric Co. are installing a little telephone system in apartment houses for dumb-waiter service arranged for the janitor or tradesman to call and talk to any tenant, or vice versa.

In this day when the landlord who has the greatest number of conveniences is the man that finds his apartments rented, one cannot afford to be without a little necessity such as the above described.

* * *

In a recent mimeographed letter addressed to the architects of New York City, Leo Desjardins, architect, of Galveston and Denver, makes an accusation that the architect and architecture as a profession is practiced in this country on the same general governing scheme as government is practiced among the "Head Hunters of Luzon." In part he says: "Every architect is out for himself, either to line his belt with the heads of the other fellow, or lose his own."

Building statistics show that the amount of business going to the average architect in the United States at present is about \$150,000 per year; that if he receives the average commission of 3 per

cent, or \$4,500, two-thirds of this is spent in sketching, advertising, entertaining and expense incidental to the making of plans, rent and superintendence. The balance of this fee of \$1,500 is paid the minority and most popular architect, the majority receiving less.

The city block in our large cities has some 20 buildings erected thereon, each planned by different architects, each architect trying desperately to outdo his fellowmen. What is the result of the "Ensemble" needs no comment.

The reason for this is that architects, not realizing that their work remains piled up before them as a public eye-sore, imagine that their profession should be run along the same lines as medicine and law.

The profession of Pedagogy in the United States is then compared to the architectural profession. What is the inference? Law and Medicine then are to put an end to disagreeable matters, while Architecture and Pedagogy are for the purpose of "creation and upbuilding" for permanent use.

The principal and underlying purpose of architecture is that of beautifying the city and this purpose will never be accomplished until all of our large cities has its architect-in-chief, this chief to be assisted by an architect representing each ward, these ward architects to have complete charge of the work in their ward, to be permanently employed as long as satisfaction is given, to receive a minimum living salary and 5 per cent on all the work he may do. It would be his aim to make his ward beautiful as a whole. Not all the buildings may be alike, but should harmonize one with the other; the best architects to be selected for the most desirable wards upon the merits of executed work or by an examination or by both.

Should this result this arrangement would mean a greater saving to the architect, no more expense to the owner, and the real gain, the greatest gain of all, the general beautification of the city, which is the broad-gauged intention in employing an architect. No owner is so selfish as to wish to destroy the beauty of the city in which he lives or is interested in for the sake of a freakishly designed building.

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ON HOME BUILDING

WITH WHICH IS CONSOLIDATED

THE JOURNAL OF MODERN CONSTRUCTION IDEAL HOMES MAGAZINE

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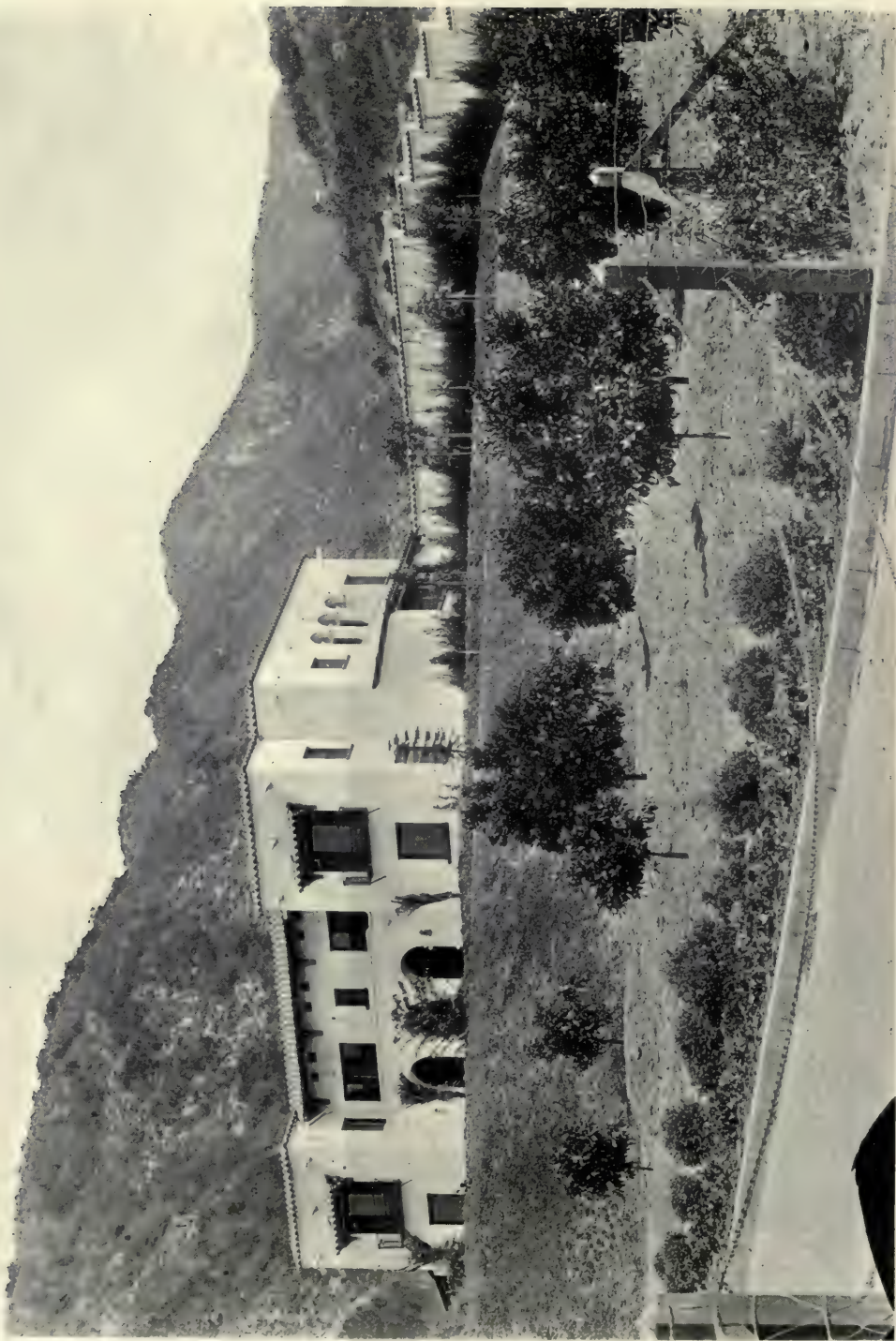
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THE FOOTHILLS OF HOLLYWOOD ARE THE PICTURESQUE SETTING FOR THIS BEAUTIFUL HOME.

KEITH'S MAGAZINE

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No. 5



THE STEWART RESIDENCE, CORNER OF ROSE AND CALIFORNIA AVENUES, PASADENA.

New Cement Houses Around Los Angeles



NEW methods of construction and new ideas in design are always an interesting study to the intending home-builder, and, indeed, to many who have not the building bee in their bonnet at this particular time. The writer has often noted the perennial interest with which the pages of a "new number" are turned and the interested and intelligent comments on the illustrations. Always it is the pictures that attract, and justly, for they tell the story

far more clearly than words. We magazine makers have gotten wise from the craze for pictures which pervades every phase of life, and this article is most freely illustrated. Some months ago, this magazine published a number of illustrations showing the new ideas in cement houses noticed in a drive around Minneapolis. An interesting corollary is drawn from a similar excursion about Los Angeles and vicinity. House architecture in the southwest, long conspicuous



THE ENGLISH FARM HOUSE OF 200 YEARS AGO IS THE MOTIFF.

for its Spanish mission and Moorish types of design, has of late been approaching more and more noticeably to the ideas of eastern architects. It is true the architecture of the Pacific coast has and will

continue to have, an atmosphere and a charm peculiarly its own. Their wonderful setting and freedom from the climatic limitations which hamper the eastern architect permit a joyous and imaginative



FRONT VIEW OF MARKHAM STREET HOUSE IN PASADENA.

type of design. Their use of color is much freer and their manipulation of material less regular. Every architect seems a law unto himself, and pays no attention whatever to the "five orders." Someone indeed has defined a good architect as "a happy combination of a trained mind, with the medium that affords most scope

turesque hills and cañons of Hollywood are the fit and romantic setting for this chaste and beautiful composition, which gleams white against its rugged background so strongly reminiscent of the mountain chains of old Granada. In front a terraced wall encloses sunny garden slopes filled with a profusion of orange



THE STEEPLY SLANTED ROOF OF THE WINGS.

to its imagination." Such a medium, in the southwest is undoubtedly cement plaster composition and the houses here pictured illustrate some of its most recent and beautiful expression. While it has been noted that the design of this section is beginning to show eastern influence the more ambitious of the cement dwellings continue to reflect the atmosphere of the southern shore of Africa and of the Mediterranean, though with a much freer interpretation.

The lovely dwelling used as a frontispiece, is an instance of this. The pic-

and olive trees and aromatic flowering shrubs which give promise of loveliness to come. The characteristic flat roof is of a composition roofing material and the red Spanish tile is used only around the copings and on the slanting shelters over the window balconies and between the projections of the front facade. The red tile give warmth and relief without undue prominence, to the dazzling whiteness and blend happily with the red and gold of the hills and their deep, dusty brownness.

This beautiful composition so exquisite



FRONT OF A LOS ANGELES HOUSE IN SEMI-SPANISH DESIGN.

in proportion and line is the work of the wellknown architects, Hunt & Grey, Los Angeles.

Somewhat upon similar lines is the residence of Mr. Stewart, president of the Union Oil Co., of California. A great setting has been chosen for this chaste and satisfying composition, a setting which adds immensely to its charm, where broad and stately California avenue intersects Rose in Pasadena, providing a foreground of beautiful adjacent homes and grounds, looking out upon the great live oaks of that park-like section, with the purple shadows of the Sierra Madre beyond—the effect romantic and imaginative in the extreme. To the appeal of such an environment, the architect, Mr. Cooper Corbett—has responded with a fine and sympathetic rendering of semi-Saracenic design.

The exterior is purely white, relieved only by the wrought iron balconies, but it is so enveloped by the thick and luxuriant verdure surrounding it that no feeling of bareness or coldness obtains. The

light and airy treatment of the arched openings with their latticed panes in the same gleaming white of the graceful columns and of the roof balustrade, also prevents any feeling of severity.

With all its romantic charm the house has a distinctly modern air and one can be sure that within are all the latest appliances and equipment for modern comfort.

In decided contrast to the types just shown but of equal charm is the cement house at Santa Ana, Calif.

Here the modern development of the English farm-house of two hundred years ago, was chosen for the motif and well illustrates the point previously made, that eastern ideas are invading California architecture. A Washington, D. C., architect designed this delightful home, and has here proven the wonderful flexibility of cement as a material and its entire adaptability to different types of design. The over-hang of the roof over the entire front and the delightful and curious way in which the roof shingles are laid, so per-

fectly reminiscent of thatch—breathe the atmosphere of Plantagenet England. The fitness of things is still further regarded by making this roof all a soft grey tone. As the house is quite bowered and shut in behind many trees, the illusion is quite complete and carries the imagination far beyond California orange groves to the rural lanes of England.

It is this sense of fitness, which gives its unusual quality to this design and has produced a harmonious composition without a false note. The recessing of the entrance portion between the two half story wings is delightful. One wing consists of a broad and sheltered porch with growing things in plenty about it, the other is a sun-parlor delightfully furnished in white wicker and gay chintz. Were we to build this house over again we would scarce know how to better it. Two views are given of a new cement house in Pasadena in which the modern touch freely appears. The central, main portion, with deeply recessed entrance flanked by wide, swelling bays is supplemented by shallow one story wings on

each side, over which steeply slanted roofs break down from the quaintly hipped main roof with its deep, down-drooping cornice. The low-slanted roofs of the one story portion are broken by low, slanting dormers as is also the front of the main roof. The great expanse of such a roof treatment is still further emphasized by being laid in extremely vivid red Spanish tile, an effect which is overpowering and somewhat aggressive. Although the plan is based upon somewhat similar ideas to the design immediately preceding, the treatment is radically different.

The Markham street house is assertive to the last degree in spite of its down-drooping roof. "Look at me! I am here!" seems to radiate from it. There are, however, many points of excellence—as the play of shadows in the angles and beneath the cornice which tend to soften the glare of white and red. The detail of the entrance is chaste and alluring and this is enhanced by the disposition of the prim box and bay evergreens in their red pots. Were it not for the magnificent



SIDE VIEW OF SAME HOUSE SHOWING SLEEPING PORCH IN REAR.

great pepper tree in front that partly veils its blinding whiteness with feathery grace, the case of this house, handsome as it undoubtedly is, would be sad indeed, so great a part does the relation of the setting to the design play in architecture. Lastly we return again to the semi-Spanish type, as shown in one of the new houses of a Los Angeles suburb. Views

and dreary commonness, however, it would not be difficult to choose. The entrance feature by itself is charming, and had it been properly sustained would have resulted in a dignified and graceful design.

Less ambitions than the preceding examples, but with a dainty and abiding charm, is the small house of smooth white



NOT SO AMBITIOUS, BUT WITH ABIDING CHARM.

are shown of the front and side elevations.

When a milliner has her spring opening it is not to be expected that all the "creations" would suit everybody. It is so with architectural creations. When one considers the divers and sundry requirements of clients, the wonder is not that some designs fail to realize the ideal, but that so many are good. We feel that the design before us is an uneasy attempt at Spanish renaissance which has resulted in a chapter of accidents. Yet between this

cement plaster last shown. Like a simple but perfectly fitted gown, there is nothing to add and nothing to take away. Simple and chaste, it is not bare or severe, by a few carefully chosen details the plainest form of design—the simple, square house—is touched with interest and grace. The wide overhanging cornice with its simple but sufficient decoration, the graceful entrance and flower boxes above, the enclosing roof of the porch with simple cap, the pergola, all are fitting and right.

The Adaptability of Woven Furniture

By E. I. Farrington

ITS wonderful adaptability is one reason why woven furniture is so desirable. It fits in anywhere.

What a fine thing it would be if newly married couples with limited bank accounts would invest in a few pieces of willow, rattan or reed, instead of buying the tawdry and poorly constructed golden oak parlor and dining room suits so commonly seen. For woven furniture is cheap as well as good—cheap, that is, in the sense that a very modest amount of money will buy something which is really worth while.

This kind of furniture also possesses exceptional wearing qualities and is not easily broken. It is light and easily moved about, but tough and flexible. Finally, it is comfortable—more so than many wooden pieces which cost much more. This accumulation of merits ought to be sufficient to commend woven furniture to home makers of all classes.

Furniture of this description, whether it be willow, rattan or grass, can be used to furnish an entire room or as an odd piece here and there to give variety and relieve the monotony of old-fashioned or heavy pieces. Probably it would not look quite at home in a Louis VI apartment, but it can be used almost anywhere else without striking the slightest note of discord.

A few years ago most woven furniture was ugly. Now much of it is exceedingly graceful and attractive. There is wide variety both in shape and cost, but some of the lowest-priced pieces are delightful in their simple lines. An excellent living room chair may be bought for five dollars

and a dollar or two more will provide cushions for seat and back.

Some of the most desirable shapes are made with wide arms or with a wide arm on one side and pocket on the other in which books and magazines may be kept, or which may be lined and used for a work basket. Such a chair is equally useful in library, sewing room or den.

Fireside or wing chairs have strong individuality and do much to dress up a living room or bed room. They are quite as comfortable as many wing chairs finished in mahogany and costing twice or



The Comfortable and Convenient Canton Chair.



WOVEN FURNITURE IN A SUN PARLOR.

three times as much. A price list on my desk shows that such chairs may be purchased for as low as ten dollars, with a very high grade model at fourteen dollars.

Chairs made in square effects after the prevailing Austrian style are charming under some conditions, although less adaptable than those with curved lines. A music room is an especially good place for them.

Woven furniture is made in many parts of the world, some of the most delightful pieces coming from the orient. The well-known Canton or hours-glass chair from China is made of rattan and as an odd chair can hardly be surpassed. It can be used in almost any situation, whether it be on the porch, in the studio, in a corner of the living room or before the fire in the chamber. It is light and cheap—selling sometimes in the stores devoted to oriental goods as low as \$4.50. No piece of furniture is better for the porch, for it is not damaged by a wetting and can be

moved about by a child, while its broad arms make convenient rests for books and magazines.

Willow is very plastic, and much of the best woven furniture is made of that material. Some of the willow is grown in this country and some is imported from France. It is cut in the spring, made into bundles and allowed to stand in water until the sap runs, when it is peeled. Then it is given into the hands of expert workmen, who fashion it into various designs with a speed and skill which are truly marvelous. It is customary for each man to confine himself to two or three designs, with which he becomes so familiar that he can weave them with his eyes shut. This work is really a form of basket-making, one of the oldest arts known, and in some families son follows father in becoming an adept at it.

Formerly woven tables and desks were not altogether successful, because of certain irregularities in the surface, but this

condition has been remedied in some of the best goods. Sometimes, too, wooden or glass tops are used and the glass top is extremely pretty if a square or brightly colored cretonne is used under the glass.

Although willow and other woven furniture is attractive enough to use in the natural color almost anywhere, it frequently is stained or dyed to fit into a definite color scheme. Any color may be used or white enamel may be applied. The cost of staining is small, perhaps a

niture is not injured, but rather improved, if allowed to stand out in a shower once in a while. When stains or paints are used, they should be flat, or nearly so. A surface having a high lustre is not at all artistic, and woven furniture should conform to the demand which is now general among cultivated people for a dull finish rather than a gloss on woodwork of all kinds.

Both the beauty and the comfort of willow, reed and rattan are enhanced by



ILLUSTRATING THE USE OF WILLOW FURNITURE IN THE HOUSE.

dollar for a chair or table of average size. Dipping is often practiced, the piece being simply immersed in the stain, but this plan results in a dead uniformity of coloring which is not nearly so attractive as the slight variations in tint which follow the application of a stain by hand. There is no reason, as a matter of fact, why the stain cannot be put on at home. It is a good plan, indeed, to use the furniture for a year or two in the natural color and then to bring about a pleasing change by staining it.

The natural color is light, so that cleaning is necessary occasionally, but soap and water can be used freely, and the fur-

niture is not injured, but rather improved, if allowed to stand out in a shower once in a while. When stains or paints are used, they should be flat, or nearly so. A surface having a high lustre is not at all artistic, and woven furniture should conform to the demand which is now general among cultivated people for a dull finish rather than a gloss on woodwork of all kinds.

Both the beauty and the comfort of willow, reed and rattan are enhanced by the free use of cushions with richly colored covers. Box seats and pads are most commonly employed, but often the upholstery is of a permanent character, being attached when the chair is built. Cretonne and chintz are no doubt the most popular materials for chair upholstery, but denim, velours, tapestries, hand printed linen and crinkled taffetas also find favor.

Everything depends upon the location which is to be given the chair. In a severe and richly furnished apartment, tapestry and velour have a natural place, but in a bed room or a modest living room the chintzes and cretonnes cannot be sur-

passed, with their warm tones and suggestion of comfort and good cheer.

Often it is possible to have the upholstery of the same material and pattern as the draperies at the windows. In a bedroom the bed covering may also be made to match, the result being highly effective. Some people have gone to the extreme of covering the walls with material of the same design as the curtains and the chair coverings, but this is not good taste. The sameness of pattern is monotonous, if not actually overpowering.

In a den or library with dark woodwork and a generally heavy atmosphere, a willow chair or a typical Chinese chair of the Canton pattern with cushions of turkey red will strike a cheerful note. For chairs to be used on a porch which is at all exposed, upholstery materials in which the colors will not run in case of a wetting are advisable, but porch chairs and settees are better fitted with loose pads and cushions than with more permanent coverings, for they can be quickly removed.

Swing seats of woven material are splendid for the porch and may be purchased for ten or eleven dollars. They are attached to the ceiling by chains and af-

ford a welcome relief from the now ubiquitous swing hammock. Some are large enough for but one person, while others will accommodate several without difficulty.

In addition to the kinds of woven furniture already mentioned, there are many other pieces; almost enough, in fact, so that an entire house might be furnished with them. There are sideboards, book cases, hat trees, wood baskets, tea wagons, magazine racks and footstools. Then there are novelties, such as electric and oil lamps, tea trays, bird cages and umbrella stands. There are even beds made partly of reed or rattan.

It will be seen from all this that the uses to which these woven materials may be put are various and numerous. No house is too elegant to possess a few pieces, and in some cases the cost is high enough to suit those people who believe that to be good a thing must be expensive, but this sort of furniture is especially commended to the attention of men and women with artistic and cultivated tastes who yet have only moderate incomes. No other kind will give as much satisfaction and pleasure for so little money.

New Cupboards in Old Houses

By Winnifred Fales

Photographs by Mary H. Northend



HAS been said that a house planned by a woman architect can always be recognized by its multiplicity of closets! Possibly the statement is to be taken with the proverbial grain of salt, but, on the other hand, it cannot be denied that the average man-made house is woefully deficient in this regard. Fortunately, it is never too late to remedy the omission, as is well illustrated by a commodious linen press recently built in a century-old dwelling,

and so ingeniously designed that it appears to have been part of the original structure. By taking advantage of the thickness of the partition, it was only necessary to have the closet project about eight inches beyond the wall line, and its dignified proportions and simple but beautiful panelling make it an ornament rather than a blemish.

The closet was divided horizontally into three sections, the upper one—to reach which a chair or step-ladder was

necessary—being used for storing extra bedding, only needed at long intervals. Blankets and counterpanes in common use were kept in the lowest compartment, while one-half of the central and largest cupboard was devoted to sheets, and the other to pillow slips, towels and wash-cloths. The entire structure was painted

was the lack of depth, as waist and skirt hangers could not be suspended crosswise and the capacity of the closet was therefore relatively small.

The first step in remodeling was to tear out the front and build an addition, thus increasing the depth to sixteen inches. Into the lower part were then fitted two



A LINEN CLOSET WHOSE DIGNIFIED PROPORTIONS AND SIMPLE PANELING ARE IN PERFECT KEEPING WITH THE OLD-FASHIONED HALL.

white, both inside and out, and the larger doors provided with glass knobs quite in keeping with the quaint old hall, with its hour-glass table and portraits of a bygone period.

Another illustration shows the satisfactory solution of a clothes closet problem. The space was originally occupied by a wide but shallow closet with a single narrow door in the middle. The interior was of course very poorly lighted, and it was difficult to reach garments hung in the extreme ends. Still another drawback

drawers—in which one-piece dresses could be laid at full length—each divided into an upper and a lower compartment by means of a light wooden frame covered with heavy muslin, which rested on narrow cleats midway of the drawer, like the tray of a trunk. Either compartment would hold two dresses without crushing. The space above, which was of ample height to accommodate skirts as well as waists, was provided with double doors whose opening flooded the interior with light and made every inch accessible.



A BUILT-IN CLOTHES PRESS WITH DRAWERS UNDERNEATH, IN WHICH DRESSES CAN BE LAID AT FULL LENGTH.

These were finished with mahogany stain like the door of the room itself (seen at the left of the closet), and the drawers and frame enamelled white to match the rest of the woodwork.

The low cupboards which flank the fireplace in the picture of a bungalow living room form a picturesque feature as well as a very practical one. They were built of plain matched chestnut boards and stained a soft olive tone which harmonized delightfully with the yellow brick of the fireplace. Their only ornament was a small sash containing four tiny squares of amber glass, set in the upper part of each door. The tops of the cupboards were made level with the mantel and provided room for a small collection of quaint lamps, brasses, and bits of pottery, and the favorite books one likes to keep always within easy reach. Inside were

stored magazines, games, and the thousand and one little odds and ends which are wanted ready to hand, and yet which give a room an appearance of disorder unless there is some place where they can be kept out of sight when not in actual use.

In a hall which has no coat closet, it is often possible to build one under the stairs or across a corner. Medicine closets can be recessed in a partition in the bath room or elsewhere, as shelves three inches wide are ample for holding bottles, and are far more sightly than movable ones hung against the wall. A mirror set in the door makes a convenient dressing or shaving glass.

Whether the interior of the closet is of wood or plaster, it is advisable to paint it white in order to make it as light as possible. Some housewives prefer to

cover closet floors with linoleum, but the mistress of a beautiful New England home always carpets her closets with China matting, which she claims is more attractive in appearance and as easy to keep clean, and shows dust less than either linoleum or wood. The same woman covers the shelves of her linen press with a small-patterned cretonne in rose-

against the wall, the top forming a shelf at just the right height to be within easy reach of one who is seated. This may hold fashion magazines, pin cushions, shears, and the various other little necessities which are forever getting lost for lack of a convenient place to keep them when sewing.

Sometimes the most unlikely places can



QUAINT BUILT-IN BUPBOARDS IN A BUNGALOW LIVING ROOM.

bud design, and the effect when the door is opened is exquisitely dainty and in keeping with the delicate fragrance of dried rose-leaves with which it is permeated. The shelves above the eye level are covered on both sides, while those lower down have only the upper surface covered, the fabric being cut just wide enough to carry over the edges and tack underneath.

A sewing room convenience is a closet lined with cedar or camphor wood, in which to keep woolen materials. As it need not be very large, it can be built

be converted into useful cupboards. During the building of one house in which the architect had failed to make allowance for a linen press, the wife of the owner discovered a space fourteen inches wide and nearly three feet deep between one side of the chimney and a partition on the sleeping floor. This would eventually have been boarded up but that she perceived its possibilities and had it plastered inside and a door and shelves fitted, thus making a closet fourteen by thirty inches, that reached from floor to ceiling. It held a generous supply of bed linen.

Hints for Spring Decoration and Furnishing

By Henrietta P. Keith



From the Richard E. Thibaut Co.

PALE GREY AND WHITE STRIPE WITH PANELING IN PASTEL ROSE, GREEN AND BLUE.

*"My room?—just let me think—
I'll have it in the pink."*

—From the Castle Builders.



PERHAPS the strongest impression one receives in a stroll through the house furnishers' and decorators' establishments, is the free use made by them of grey and rose or mauve tones. Combinations of these colors are shown in an endless variety of shades and materials. The grey shades cover the whole gamut of tone, from the pure grey formed by a mixture of black and white, to the tints obtained by introducing yellow, blue, green, or some form of red. The effects produced in grey nowadays are as far as possible

removed from the uncompromising shade with that awful purplish cast known as "gray" of a decade ago. Cold and hard, it went along with the steel engravings that used to adorn our walls. One could not imagine it even distantly related to the shimmering grass cloths, silvery in the light and soft in shadow—the delicate misty greys of landscape papers or of the French brocades, the shadowy ground of tapestries, with their crisscross of black lines like an old French print—or the background papers for bedrooms, in cool or warm, but always soft, narrow stripes made by varying blacker lines on a white ground. Some of these latter vary the plain grey and white stripe by



ARRANGEMENT FOR AN INTERIOR, DECORATED BY MOORE & SCHRIVER, MINNEAPOLIS, MINN.

the introduction of very delicate color at intervals in pastel shades of rose, green or blue. Charming and fascinating effects of this sort are shown.

One thing the lighter grey papers do demand, and that is white woodwork. The exception to this is the wood finish of grey-fumed oak which blends delightfully with the grey which is nearer the tone of ashes of roses and combines admirably with Circassian walnut furniture. The foil needed for this tone is old rose or some of the lighter mulberry shades, in draperies and furnishings. It needs the warmth and cheer of these tones, and rich fabrics with pile and sheen. Given these and one has a room of distinction.

This new tint is neither rose nor wine nor crushed strawberry, but partakes of all three, and is especially good with greyish fumed oak or Circassian walnut furniture.

Or suppose one wants a parlor, elegant

but not sumptuous, and suppose one has white woodwork and a Persian rug in blended rose green and blue on an ivory ground. Let such a one cover the walls with a shimmering grey grasscloth straight up to the white cornice and the white ceiling. Let some of the furniture be upholstered in an imported cretonne, all in soft greys with a tinge of rose, and put hangings of the same at the windows. This is the place for Dresden china candlesticks or candelabra on the white mantle shelf, and for an old fashioned mirror in a gilt frame above.

In a charming cottage home just completed, the living-room-parlor with its ivory-white woodwork and ceiling, has its walls covered with a tapestry paper all in the softest grey foliage, but with large soft crush roses shading into mauve with pinkish hearts. Strange to say the old fashioned pinkish red brick of the fireplace hearth and facings with its wide

raked-joints of white, "went" perfectly with this decoration. These greys and mauves are not only harmonious, but delightfully cool in effect and most grateful in summer. They are not, however, pleasing with dark wood, which demands stronger coloring.

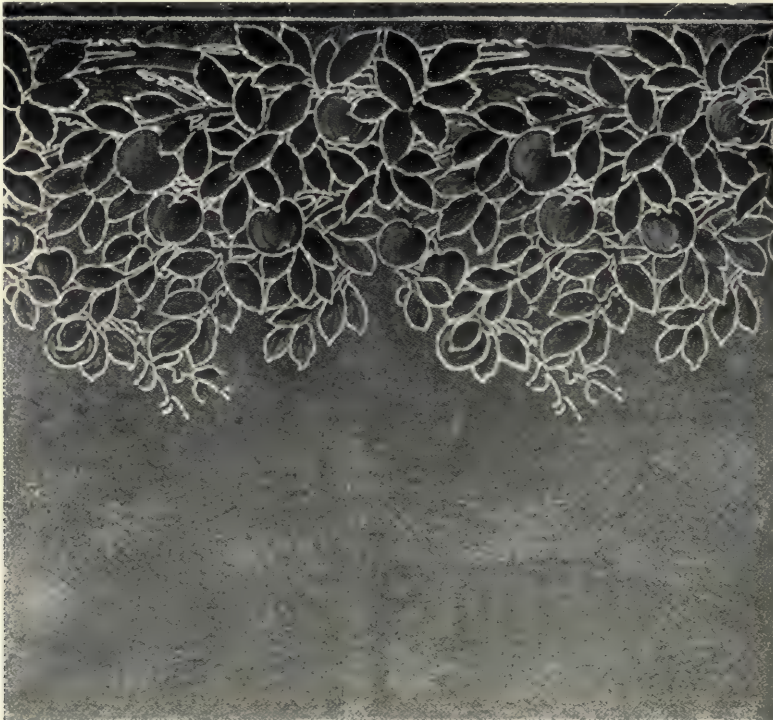
Illustration No. 2 shows an arrangement of wall paper and draperies just used in the interior decoration of a Minneapolis house, in which the deeper shades of fawn or brownish grey are combined with birch woodwork stained a greyish brown, for the living room. The wall paper is a textile effect in the brownish grey at 60 cents the roll; the velvet door hanging is a deeper shade of fawn, the material \$3.00 a yard, 50 in. wide; the English printed linen is for side hangings to the windows and is a bold design of deep red roses, mixed with poppies, etc., in very rich coloring on a natural linen ground. This material is \$1.50 a yard. This living room opens on one side into

a hall hung with a floral tapestry at 75 cents a roll, in rather light tones, in a coloring of dull reddish pink roses with foliage in dull greens and browns on a clouded brownish white ground. The portieres of fawn velvet on living room side are lined on hall side with a Kintbury Sunfast material in old rose red which tones in perfectly with the dull red of the tapestry wall but has wonderful life and shimmer.

The dining room is done in a foliage paper at \$1.50 yard, in the softest blues, rather light blues, with greenish greys. It has ivory white woodwork and the top of the room has a simple wood cornice of the same. The portieres are of rich, royal blue velvet, and the window draperies a lighter shade of blue casement cloth at \$1.00 yard.

To Return to the Lighter Tones.

In a recently decorated home, the walls of the rooms on the second floor were all hung with grey papers differing only



BLENDED BROWNS, WITH CROWN OF FRUIT AND LEAF MOTIFS.

slightly in color tone, the rooms being individualized and given interest by the wall decoration and the furnishings. In one room the wall paper was the true grey of black and white mixed, but a very delicate tone in a narrow, half-inch broken stripe with a fabric surface. The very beautiful decoration on this ground con-

grey and mauve mixed. One of the prominent furnishers of stencil designs shows a wisteria design which quite nearly reproduces this effect, if one were not enough of an artist to attempt the free hand work.

In another chamber of this house the pale grey wall was a small, very delicate



LIVING ROOM WITH IVORY WOODWORK AND RICH CRETONNE HANGINGS.

sisted of a frieze of pinkish mauve wisteria, dropping down at intervals in long slender racemes of blossom. The mauve tones were softly blended with the pale and infrequent green of the young wisteria leaves on the darker grey stems.

"Like Europe's Violets—Faintly Sweet"—this lovely decoration, done free hand in water color in broad style, was the work of the young lady of the house. The woodwork was ivory, and the rug

pattern paper, and under the white molding at the top, as though hanging from it, French wicker baskets of gay pink roses were arranged at set intervals. The rugs were small, with grey and white centers and 15-inch borders of pink roses with green leaves. The thin glass curtains were supplemented at the sides by folds of a casement cloth fabric, mercerized to give it a silky texture, in a plain rose color. Half the width of the 50 inch



Cretonne to Match Frieze in Dining Room, with Ivory Woodwork.

goods was used on a side and on the inner edge across the bottom a three-inch band was stitched of small pink flowers and green leaves on a white ground; the whole then lined with cream cambric. This also was the work of the daughter of the house, an example in point of the statement that beauty in the house is not dependent upon a long purse.

The furniture was greyish white enamel in simple lines and ornamented with small bouquets, daintily painted.

The dining room in the same house was delightfully treated in ivory woodwork, with ivory walls topped by a gorgeous frieze of birds of paradise and gay flowers. The only hangings were of cretonne in rich colorings, while the chairs were upholstered in spring-green leather. The great living room opening from it was similarly treated in ivory with the same cretonne hangings. Both rooms open upon a flagged terrace with a pergola roof and rose-wreathed, white pillars.

One wonders where the designers can get inspiration for the fresh effects seen in the still popular cretonne craze, though other patterned fabrics in cotton and linen are included under this head. We are

even becoming accustomed to some of the more striking departures of last season, such as the Chinese Chippendale forms and colors of decoration, with black backgrounds enriched with much gold and lovely hues of rose, green, blue and ivory, softly blended. Such a fabric must be associated with stately rooms, and the relation of the woodwork and furniture to the fabric, must be carefully observed. The rich strong colorings, the stateliness of fold and texture of these fabrics tones in well with the wood finish used in the fine furniture of the day. These black backgrounds, with strong rich coloring of bold design are extremely effective in the cretonnes, when discreetly used. A Morris chair in natural wicker, for instance, upholstered in one of these cretonnes, is an excellent choice.

Still there are but few who would have the courage to copy one decorator's use of the black ground for a whole wall, with ivory woodwork, a black velvet rug and much white statuary.

A scheme of decoration recently seen is certainly a departure from the trite and



Pale Greyish Tan Ground with Wild Rose Crown.—60c a Roll.

the conventional. The architect—a woman by the way—of the house, also designed and superintended the decorations, and her scheme for the lower floor was a processional of the seasons. Varying tones of grey were used in all the rooms as wall backgrounds. The living room is an effect of spring, and here the walls are of a pale, shimmering grey broken by friezes of spring flowers. The woodwork is white enamel and the hardware and lighting fixtures of dull silver.

The breakfast room, in warmer greys, with a broad frieze of flying birds of bright plumage flitting through a riot of summer flowers, represents summer.

The dining room on the south shows a wintry landscape of snow-capped pines and fleecy woods on a grey ground. The lighting globes are frosted and the woodwork white. Anything cooler and more inviting on a hot day it would be hard to devise.

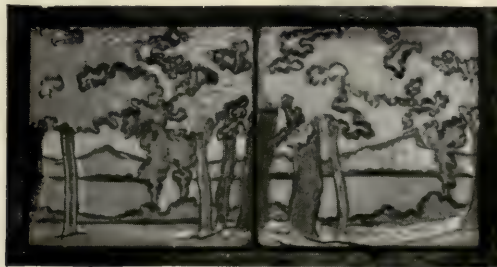
The crown hangings—that is, the frieze decoration and side wall printed on the same strip and ready to hang—are more interesting than ever. They are especially useful for decorations of moderate cost, as the expense of hanging is far less than for separate crowns and side walls. An effective design is illustrated which shows one of the Tiffany blend papers at \$1.00 a roll for the side wall in rich tones of cigar and light brown tinged with green, and a crown or frieze of fruit and

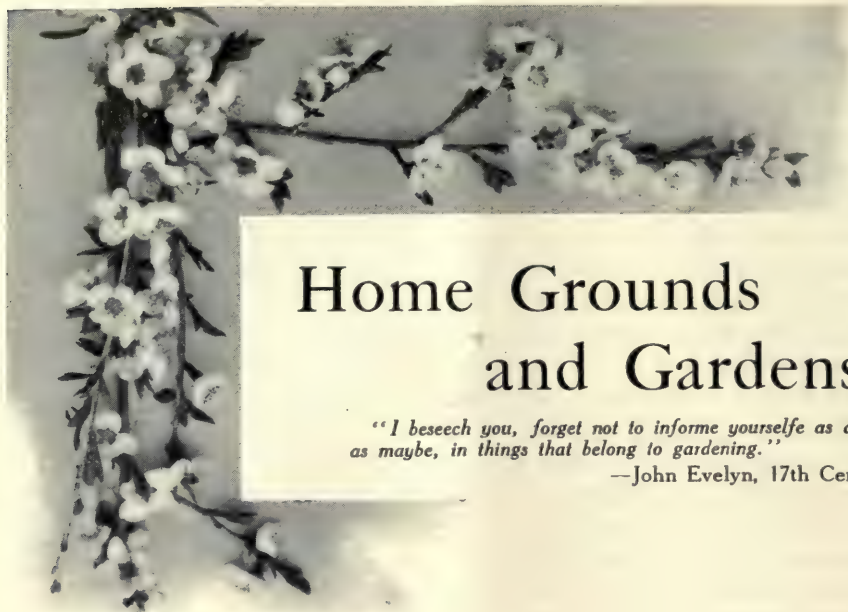
leaf motifs outlined in gold. The same design can be had without the gold outline.

A pretty little chamber has a side wall of broken checked chambray in a very pale greyish tan with a wild rose vine crown, long drooping sprays of the pale pink roses and grey foliage falling gracefully over the side wall. This dainty decoration is carried out in the side draperies of the windows of cretonne in a design of larger wild roses and grey foliage over glass curtains of white voile edged with ball fringe. The bed spread is of pale grey seeded dimity bordered with the cretonne, and is carried up over the bolster. The same cretonne is laid under the glass top of the dressing table. This paper is 60 cents the roll.

For rooms demanding a strong and substantial treatment there is nothing to take the place of the different burlap weaves, now so varied and rich in color effects. We have many times mentioned the Shadow Konas which came out last year, in soft and blended colorings with a gold thread running through giving a character of elegance and refinement where the ordinary burlap might be too severe. The same firm have just brought out a new product, called Fres-Ko-Na sheeting, which is a light weight and pleasing material.

Rugs and furniture demand a chapter to themselves, at a future time.





Home Grounds and Gardens

"I beseech you, forget not to informe yourself as diligently as maybe, in things that belong to gardening."

—John Evelyn, 17th Century.

My Idea of a Garden

By Harry Franklin Baker



HERE is there a man who has not planned and looked forward to the day when he would have a home of his own, with land enough for a garden? A garden shut in from the rest of the world to which he can retire after a hard day's work, to spend his leisure with his family, or for a chat with some friend. Such a garden is an ideal spot for a quiet smoke while one reflects on the problems of the day, and as the shadows lengthen and quiet prevails, the flowers by their fragrance and the other garden life cast their spell around him until they bring peace to his mind, a kindly feeling towards his fellow-men, with faith and courage for the morrow.

Of course such a garden would provide room for the children to play in and a corner where they may grow things for

themselves—for this is a garden for the entire family and must exert its influence on everyone in the home.

There must be an arbor or pergola with seats, shade where one may lounge in the hammock, or possibly there may be a tree around which a seat can be constructed, as shown in the illustration. The old seat here has been the center of attraction for the children living in this garden for many years. They play around it, climb over it, eat their lunches there, and in later life will always remember the good times they had around it.

There must also be an abundance of sunshine to make both the owners and plants glad to be alive. Possibly room may be found for a small pool to contain a few gold fish and reflect some of the garden's beauty. Then there must be trees and high shrubs to screen from view

any unsightly buildings near by and to separate the service portion of the grounds.

In winter, as well as in summer, this garden must exert its charm. There must be trees with colored bark, shrubs with red berries to contrast with the ever-greens and snow. Then when at last the first sunny days of spring tempt one for a

Perhaps to you a garden of this sort seems only possible to the owners of large estates. Such is not the case, however, as many of these features can be had in a small garden on a forty foot lot—but how? The easiest and most natural way is to go to a landscape gardener for a plan and advice, but not everyone can afford this, and then there are some who like



THE CHILDREN TAKE MUCH PLEASURE CARING FOR THEIR FLOWERS.—THE TULIPS ARE FOLLOWED BY OTHER PLANTS WHICH BLOOM THROUGHOUT THE SUMMER.

stroll out of doors, he will look for his garden friends of the year before and—sure enough, there they will be, for some of the spring bulbs bloom almost before the snow is gone. Then each succeeding day brings a new delight from the bursting buds of the trees and shrubs, and the perennials, awakening from their winter's rest, come up stronger than ever, adding their changing beauty one after the other. Thus, throughout the entire summer and well into the autumn, the advancing season is recorded by the changes in the garden, until finally, all is quiet again and the plants are covered up snug and cozy for their winter rest.

to do their own planning and make their own gardens. A few suggestions may be of some help.

The first step is to measure the space to be occupied by the garden and draw a plan of same on paper to scale. A convenient scale for a small garden plan would be one-half inch to the foot. On a plan drawn to such a scale, each inch would represent two feet in the garden. Next, after the outline of the ground is drawn, take the plan out into the garden and mark on the plan the location of all of the buildings and large trees. Also indicate the direction of north and south to determine which part of the garden will



SOME OF THE SPRING BULBS BLOOM ALMOST BEFORE THE SNOW IS GONE.

be without direct sunlight because of the shadows cast by the buildings and trees. If there are buildings or large trees on the adjoining property to the east or west which will cut off the sunlight from the garden, their location also should be indicated on the plan. By this method the plan will show where it will be necessary to use only plants that will grow in the shade. Next locate on the plan any un-

sightly buildings or conditions, such as ash piles or garbage cans, either on your own or adjacent property, that it would be advisable to "plant out." That is, to plant trees or shrubs so situated that they will serve as a screen. Now we have determined the most important conditions that we must keep in mind while planning for the detail of the garden, which we will take up in our next number.

Garden Hints for May

It is time now to start cold frames in the northern states. By the use of cold frames many annuals such as asters, petunias, alyssum, calendulas, solpiglossis, scabiosa, and others, may be made to bloom from four to five weeks earlier than when planted in the open ground.

April is a good time to scatter a little

nitrate of soda or bone meal over the lawn—be careful though not to use too much. Any bare spot in the lawn can now be brought into condition by loosening the earth and planting some grass seed.

Don't delay placing orders for seed, perennials and shrubs.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 419 A. M. WORTHINGTON, Albany, N. Y.
 B 420 CHAS. S. SEDGWICK, Minneapolis, Minn.
 B 421 F. E. COLBY, Sioux City, Iowa

Design No.

B 422 BUNGALOWCRAFT CO., Los Angeles, Cal.
 B 423 A. C. CLAUSEN, Minneapolis, Minn.
 B 424 KEITH'S ARCHITECTURAL SERVICE, Minneapolis

Design B 419.



SUBSTANTIAL and well planned house of rough-cast plaster and English half-timber. The house is set on a foundation of rough stone with cement water table. On the left, a projection of good proportions give a solarium of 10x14 with a flat roof railed in to form balcony upon which the owner's chamber and the up-stairs den open. The splendid living room, 14x22 ft., extending the entire depth of the house, opens through French doors into the solarium below. The arrangement of the floor plan shows a large dining room with bay extension across the hall with the service part of the house including every convenience. There are three large chambers and the den on the second floor with good attic space above.

The wood finish inside is oak on the first floor in main room, and birch or pine on second floor. All floors of oak and beamed ceilings in dining room and den. There is a full basement and hot water heat. The height of first story is 9 ft. 2 in.; of second story 8 ft. The estimated cost is \$6,000, exclusive of heating and plumbing.

Design B 420.

Here we have a home substantially built with solid brick walls, plain, rectangular in outline, 40 ft. in width across the front, and 36 ft. in depth, exclusive of the front and rear porches. This is a strictly up to date modern home, recently planned for a banker in a western city.

It comprises four rooms on the main floor and four on the second floor, all of ample proportions and well arranged, every detail having been carefully studied. The exterior treatment of the front is symmetrical with a liberal central porch having a terrace extension on each side, across the entire front. The floors of the porch and terrace are made of concrete with cement or tile blocks and stone steps. It is estimated to build this house complete exclusive of heating and plumbing for \$7,500.

Entering the house through a central vestibule, the main staircase leads up directly in front in the center of the house with double platforms, landing in a square hall in the center of the second story. This is an economical use of the floor space, and there is no waste room, as you enter all the chambers directly from the square hall. In addition there is a convenient sewing room between the front chambers, and all of the rooms have large clothes closets, the main family chamber having two large closets. There is one main bath room on the second floor.

From the left of the entrance on the main floor is the large living room with wide center fireplace the chimney projected on the outside. Back of this living room is a large bed room that may be used for a library or den if desirable, and out of this room in the rear is a bath room. At the right of the main entrance is the dining room, connecting with the main hall with wide sliding door. The

dining room has a Dutch window projection at the side and a recessed sideboard at one side. All of the kitchen accommodations, pantry and china closet conveniences are very complete. There is also a rear stairway leading to the second story, the main stairs extended up to attic. The finish of the house is in hardwood throughout with polished floors. Opening from the rear second story chamber is a sleeping porch over the rear porch. The attic is provided with several rooms well arranged. The basement is full and complete with laundry, etc., and servant's bath room.

Design B 421.

We have here a plain exterior without frills but substantial and roomy. It is of frame construction with large dormers in the high roof. A square bay extension increases the dining room space. There are four good chambers all opening into a central hall and a sleeping porch in the rear. Hot water heat and full plumbing are included in the cost estimate with oak finish in main room of first floor. The floors are oak and maple upstairs.

The basement walls are 8 ft. in height, the first floor 9 ft. 6 in. and the second floor 8 ft. 6 in. Estimated cost is \$5,000.

Design B 422.

The bungalow illustrated herewith is, given in response to many inquiries for a large house "all on one floor." It is one of the most attractive bungalows in Los Angeles and not only lends itself to outside beautifying with vines and shrubbery, but it furnishes most charmingly and is altogether a house to be proud of. Everything is attractive about the house. The roomy front porch 38 feet long and 8 feet wide, the entrance vestibule, the cozy reception hall with its nook and seats, the large living room with broad open fireplace, handsome mantel with seat and bookcases on either side and but-tressed opening to the hall.

The dining room is an exceptionally pretty room with fireplace and buffet, high paneled wainscoting and plate rail.

There are four fine bedrooms, a large bathroom easily reached from any room, no fewer than six large closets besides the cupboards, bins, closets and cooling closet of the perfectly arranged cabinet kitchen. An enclosed stairway leads to the attic where there is ample storage room, or where two large light bedrooms may be built with roomy closets.

The dining room chimney also carries a flue for the kitchen range for which there is a very convenient corner.

The outside construction is of weatherboarding with shingled gables and shingled roof. The porch work is massive, built of hard blue burnt brick pointed with black mortar to match the exposed chimney. As built, the house has no cellar but one of almost any size can be built with stairs down from the screen porch and an outside entrance as well.

The exterior of the house should be all of rough material stained a weathered oak with olive trimmings and moss green roof. Living room, dining room and hall have oak floors and the completed house which is 38 feet front by 36 feet deep will cost from \$2,600 to \$3,500 according to finish and locality.

Design B 423.

It is possible to get quite a house for a moderate sum, by using the simplest, square form and closely planning all material, eliminating all unnecessary detail. This has been done in the design here shown. The exterior has, however, an appearance of greater depth, from placing the porch on the side of the house, where entrance steps lead up from the rear wall. Direct entrance into the living room from the front eliminates the hall, always an expensive item. The stairs go up from the main room, which is long enough to spare the space. This entrance, with its sheltering roof overhead, the flower box



A. M. Worthington, Architect.

DESIGN B 419

A Unique Cement Exterior

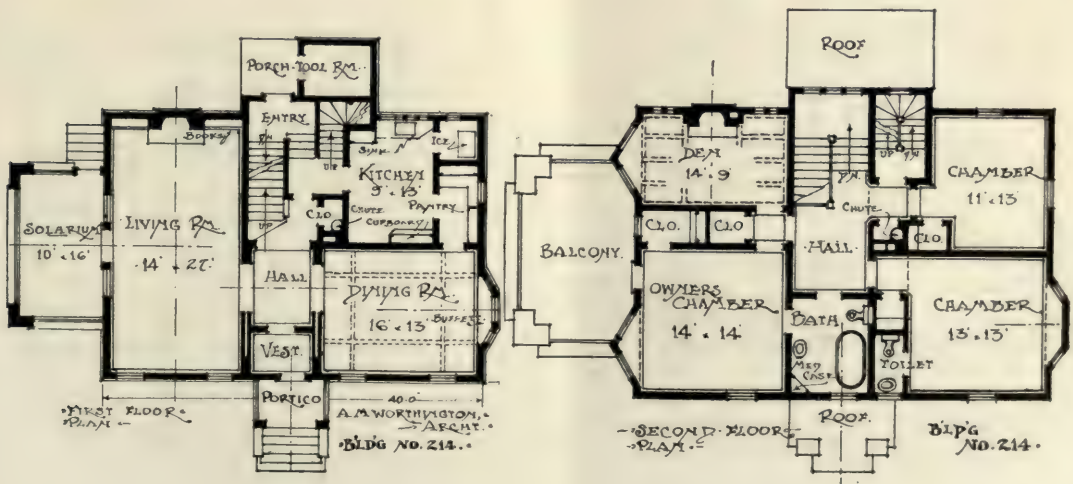
beneath the group of windows, and the wide roof cornice, are features which take away any feeling of severity.

There is a laundry in the basement, and hot water heat. The finish of the first floor is hardwood with hardwood floors.

Pine finish on second floor. The estimated cost is \$3,500.

Design B 424.

This attractive cottage design on bungalow lines possesses many advantages. Not only are the simple lines of the ex-





Chas. S. Sedgwick, Architect.

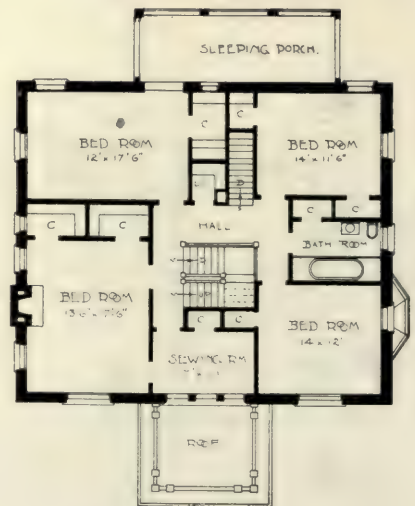
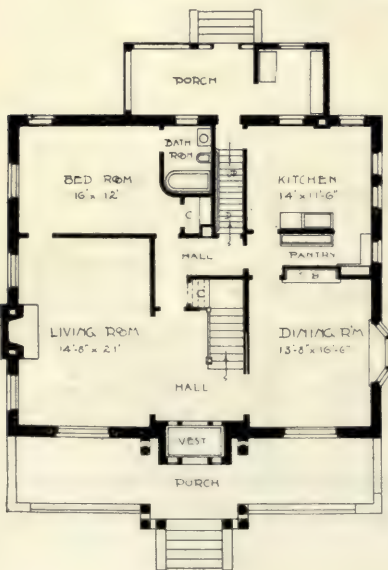
DESIGN B 420

A Substantial Brick House

terior pleasing but there is unusual interior accommodation in a ground area of 34x35 which includes an 8 ft. porch across the front.

The exterior is plaster with a shingle

roof, but the design would be equally effective in frame construction or part shingle and stucco. The floor plan shows one side of the house devoted to living and dining room with arch between. On

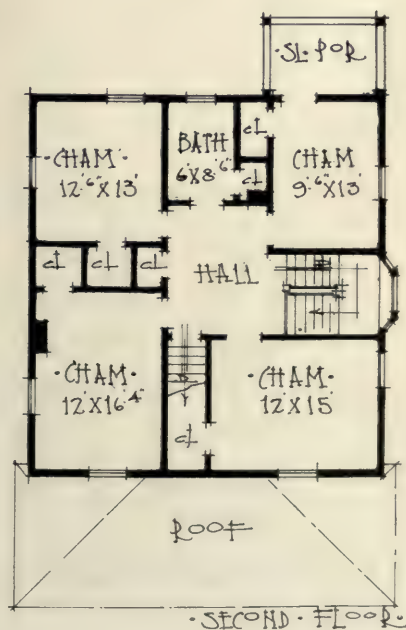
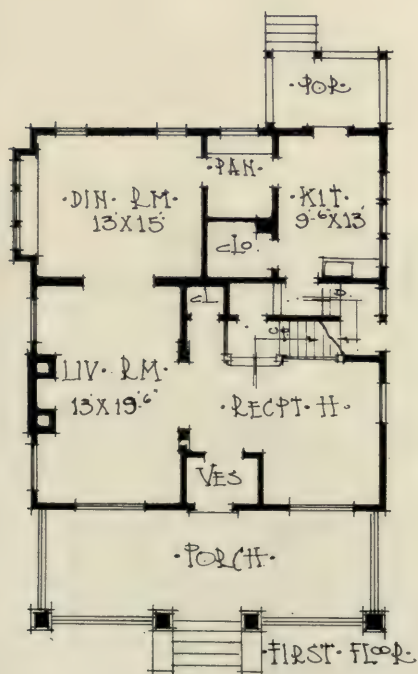


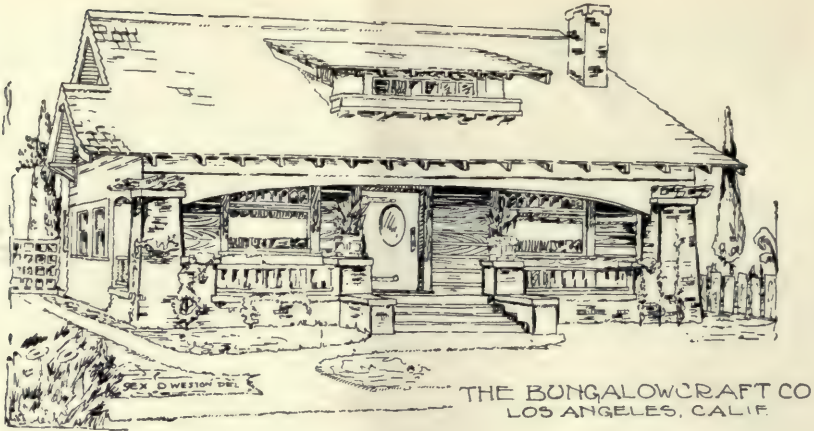


F. E. Colby, Architect.

DESIGN B 421

A Good House for \$5,000





The Bungalowcraft Co., Architects.

DESIGN B 422

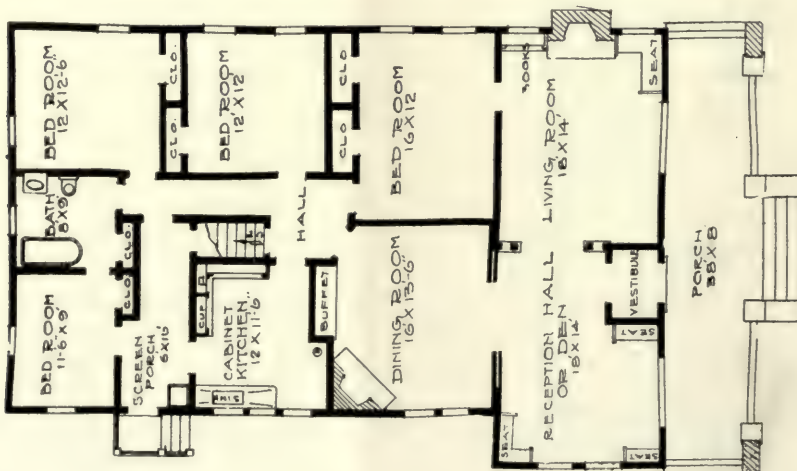
A Spacious and Convenient Bungalow

the other side of the hall is arranged a first floor bedroom and bath, with kitchen. A first floor bedroom is very desirable for many families. The wide roof and large central dormer permits of three good chambers above while still preserving the bungalow lines of exterior. A second bath could be taken from the large

chamber on the left and still leave a good sized room.

There is a full basement, hot water heat and the finish on first floor is hardwood. Second floor pine. The height of first story is 9 ft. Second story, 8 ft. with the lowest wall height 7 ft.

The estimated cost is \$4,000.

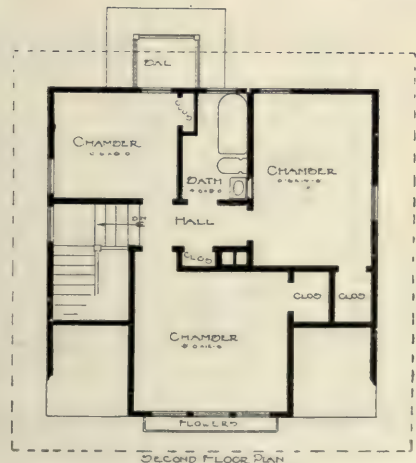
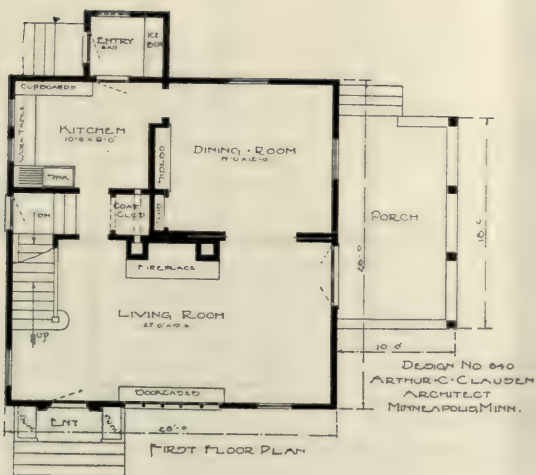




A. C. Clausen, Architect.

DESIGN B 423

Another Cement Plaster Design

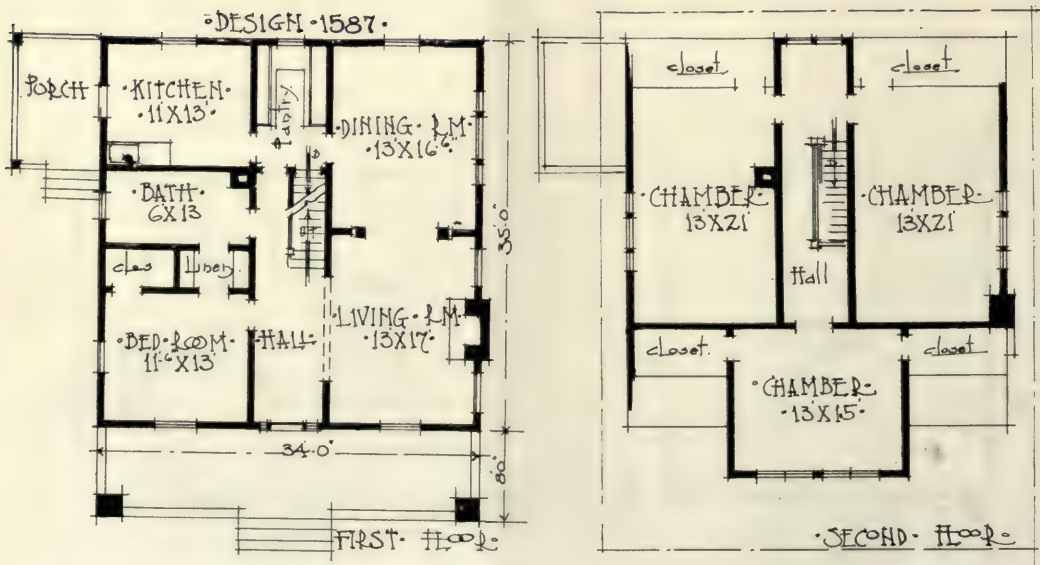




Keith's Architectural Service.

DESIGN B 424

Attractive Cottage Design on
Bungalow Lines



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Periods in Furniture.

WE hear a great deal about period furnishing; indeed, period furniture has made its appearance in the department stores. So perhaps a few words on the subject may not come amiss.

Some of the period furnishing is French, some English. The French furniture is less influenced by other styles than the English, which derives largely from the Flemish and Italian Renaissance.

French Period Furnishing.

There are three periods of French furniture, not including the Empire, which overlaps the English styles. They are named from three French kings, Louis XIV, Louis XV and Louis XVI. They are distinguished by the character of their outlines.

Louis XIV furniture combines straight and curved lines. Its typical pieces are high-backed arm chairs, with wooden armpieces and upholstered backs and seats, tables and writing desks gracefully curved and elaborately ornamented with applied scroll work in brass, gilt or tortoise shell. Sometimes the frames are polished walnut or rosewood, sometimes they are gilded, and the upholstery is brocade, damask or velvet, generally in crimson. Furniture of this period reflects the magnificence of the reign of the Sun King and is seldom reproduced except for the very rich.

The Apotheosis of the Curve.

In the next period, that of Louis XV, the curve ran riot. In whole suites of furniture you will not find a single straight line, however short, not even the rear line of the seats. Backs are lower,

armpieces are solid and always upholstered, surfaces as well as outlines curve, and are covered with flowered brocades in brilliant colors on light grounds. In addition to the sofas and arm chairs of the preceding reign are long ottomans with elaborately carved, curving legs, and the chaise longue, a sort of arm chair with extended seat. To this period also belong closets for china and curios, with glass doors, raised on high curved legs and hanging, glass-fronted cases for miniatures. This, too, is a period of much gilding and profuse ornamentation. In looking over a book of designs of this period, it is easy to see the genesis of much of the parlor furniture of the middle of the nineteenth century. As has been often suggested in these columns old parlor furniture opens many possibilities to the clever amateur, who is able to look beyond the hair cloth surface and the glued-on ornamentation to the essential structure of the pieces.

The Era of Simplicity.

With the reign of Louis XVI and Marie Antoinette we come to the simplest and daintiest of the French styles. The pieces are much smaller than they have been, legs are straight, backs usually square, ornamentation of the simplest, delicate flutings and classical wreaths. The pieces are covered with light-colored, dull-surfaced tapestries, sometimes striped, sometimes figured with pastoral scenes, in the manner of Watteau, the backs of sofas or chairs being nearly covered by one of these medallions, an all-over design in harmonizing coloring being used for the seats. Sometimes floral medallions, round or oval, are used on both backs and seats.

To this period belongs most of the fur-



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niture with panels of fine canework and frames of carved wood painted white or gray. This is an idea which has been made use of very largely of late years by the manufacturers of furniture of the finer sort, but nothing is uglier than the cheaper kinds, in which cane work of poor material and coarse workmanship is inserted in dark frames of stained and varnished wood.

Early English Furniture.

It goes without saying that this is rarely attainable except in reproductions, and was almost invariably oak, ranging in color from nut brown to black. Of late years a good deal of dining room and library furniture has been made after Elizabethan models. The pieces are of large size, rather low than high, not carved at all, but finished with a plain round beading, and very often this same beading forms a panel of the faces of drawers. A hanging handle of turned wood is peculiar to this style of furniture. It is an admirable style but suited only to spacious rooms and houses of some pretension. It is out of keeping with papered walls, but tones in well with the brownish gray of rough cast. Some of the smaller pieces might be used with good effect in a hall, with a wall of orange brown or copper red and woodwork of the same tone as the furniture.

English furniture of earlier date than this is usually Gothic, and of a style which is more appropriate to churches than houses, so completely has the Gothic

inspiration departed from domestic architecture. But it is interesting to note that some very beautiful carved furniture on Gothic lines is being made by an artistic settlement in Pennsylvania.

First Empire.

The furniture of the First Empire was an expression of the personal taste of Napoleon, and its outlines and ornamentation were derived from Greek sources. Torches and garlands and acanthus leaves are among the decorative forms used. The piece of Empire furniture most often seen in this country is the double or single mahogany bedstead, with head and footboards of equal height and with rolled over tops, like the volutes of an Ionic capital. Some of the mahogany card tables with hinged tops are Empire and many mirrors have frames whose decoration copies the classic motives of this period.

And apropos of the bedsteads just mentioned, one of them in the narrow width makes an admirable couch, with two large pillows standing stiffly against the wall, and they and the mattress covered with cretonne or tapestry.

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From Elizabeth to the time of Queen Anne there was no great change in the style of furniture, and the name Jacobean is given to the furniture of the two Jameses, the two Charleses and of William and Mary. Solid construction, rectangular outlines, high backs, carving in



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DECORATION AND FURNISHING—Continued

low relief, canework panels and the universal use of oak are all characteristic of this period. The typical chair has rather a low seat and a very high back, whose outline is a semicircle, flanked by straight lines. The sofa or settee is three chairs side by side with the arms cut out, except at either end. Late in the century, after the Restoration, leather upholstery is replaced by tapestry in large effective designs, much like the crewel embroidery



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the women did, and it is fastened on with large ornamental nails.

To this period belongs the delightful gate legged table, or thousand legged as it is sometimes called, while still another name is the Cromwell table. It is certainly one of the most effective tables ever made, but it need an open space to display the full beauty of its intricate underpinnings. It is possible to get these tables, reproduced in oak, of excellent workmanship and stained to any desired tone, at the moderate price of eighteen dollars, and they are delightful either for the library or for the small dining room.

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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.
 © Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

The Question of Rugs.

H. B. H. "Am enclosing a rough plan of the floors and a stamped addressed envelope for reply. The house faces east and is located in the suburbs where there will be no house closer than 30 or 40 feet, with plenty of light for all rooms, is of the Bungalow type, though all rooms on the second floor will be full eight feet with no break in walls; outside to be shingled all over. We had thought of a dark green stain or paint for side shingles with white trim, and were undecided as to the best color for roof shingles. Would a dark red roof be in good taste, or would you make it green of a lighter shade than the sides, or do you think some other color would be better for the house?"

"We have a 9x12, bright red rug, with a border in green and tans, oriental design, that we must use and had thought of putting it in the dining room, which is a north room. Please suggest colors for wall decoration. Furniture is golden oak, floors quartered white oak to be finished natural, woodwork oak with plate rail, no beamed ceiling.

"Living room being an east room, we had thought of either green wall decoration with brown rugs, or a golden brown wall covering with green rugs, woodwork and floor white oak. Unfortunately we must use some mahogany furniture in this room. Please suggest treatment of the woodwork and windows. Fireplace and mantle to be of red brick. No beamed ceiling. We will get new rugs for use in this room.

"Bedroom on first floor to have brass bed, golden oak furniture, pale or Nile green Wilton rug having some old rose and tan in lighter shades. Would like white or cream enamel woodwork. Please suggest best color for wall decoration. The room will have south exposure."

Ans. Replying first to your request for suggestion as to exterior color scheme, we do not think a light green roof with dark green sides advisable. The red roof with green walls would be very pretty if there are trees. If, however, the house stands in the open, we would prefer a less conspicuous treatment, such as a green roof with grey stained wall shingles.

With regard to the interior: The red rug and the red brick mantel are things to be reckoned with. They are strong features and strong contrasts such as red and green are not advisable in room treatment unless in the case of a den or similar room. Inasmuch as your living room has north and east exposure besides being shaded by porch, we should not try to use green in this room, but keep all the tones in soft ecru shades with fumed brown woodwork and rugs having soft ecru tint, that will not clash with either the mahogany furniture or the red brick mantel. Touches of soft rose red in cushions, etc., would be introduced. The dining room woodwork the same; the same ecru wall, but a frieze decoration could be used of green foliage and red apples. Such a frieze comes in paper about 14 in. wide and 45c yard.

In the south bedroom with pale green rug you cannot use a very delicate wall on account of the golden oak furniture. We should advise woodwork painted deep cream and a pale tan wall with cream ceiling. We would repeat the green and rose of the rug in the window hanging and some chair coverings. The east chamber would be charming with wall paper of pale grey chambray and frieze of grey foliage and pink roses. Such a paper can be had at small expense. But we strongly advise painting the woodwork white. A 25c Madras with

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border of pink roses for curtains and deep pink and grey rag rugs would complete the room. Furniture painted grey. A good treatment for the woodwork in the screened sun parlor would be to stain it Bog Green. Tint the plaster grey or leave it in the natural grey, have a grey Scotch rug with green and dull red in border and use wicker furniture upholstered in gay green and red cretonne.

Scheme for a New House.

C. E. H.—"As a subscriber to your magazine, I avail myself of your kind offer to advise in regard to interior decoration. I enclose stamps for reply and a rough sketch of the down-stairs floor plan, and I would be very appreciative of suggestions as to finish. The house is to face directly to the west and has plenty of space about it. The furniture for the den is already on hand and is entirely of mahogany. The other furniture is to be purchased later and can be made to conform to the finish decided upon. I would appreciate it very much if you would suggest a plan of interior finish for the dining room, hall, the living room, and the den, including floors, paneled wainscoting, and wall decoration. There will be two upstairs bedrooms, and one of them will have to be finished to match mahogany furniture. The other will be furnished new, etc."

Ans.—It is a pleasure to make suggestions for such a beautiful house. Taking up first the question of interior woodwork, we would suggest a fumed oak stain in hall and dining room with floors the same. This finish is not so dark a brown as mission; is softer and newer, with better blending qualities. We should like a wood wainscot in both hall and dining room. We would keep the complimentary color tones in the northwest dining room, rose with touch of yellow with deep cream ceiling, using above the wainscot a decorative paper with soft grayish browns and tints of rose and yellow. Rug in the same coloring. At the small windows over sideboard, use short curtains of thin yellow silk, tied back; at the sides of the large west window draperies of camel or fawn colored velvet with the same for dining room side of the opening into hall.

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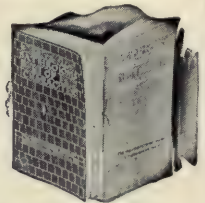
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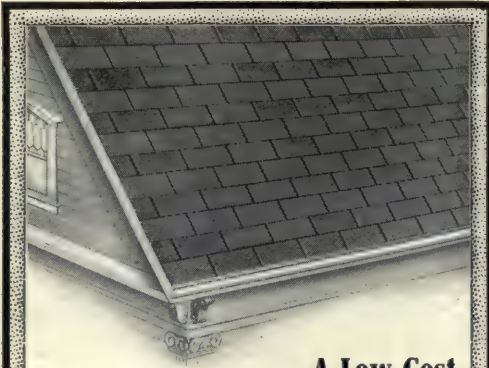
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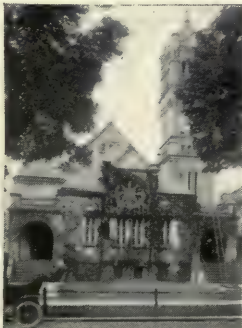
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The living room we would like to do in the silvery gray stain on either oak or ash, floor the same, using a mixture of mahogany and wicker stained silvery gray furniture. The walls of Favrile blend paper in fawns and grays. The rug and hangings rich old blue. The wicker furniture upholstered in the plain blue velvet or corduroy, with one or two mahogany chairs in tapestry. Such a scheme as this is a departure from the hackneyed browns and greens, while it is quiet and serviceable. If preferred, however, a mahogany stain could be used of green and grey furnishings.

Decoration of a Bungalow.

H. E. S.—“I am a subscriber to your magazine and think a great deal of it.

“I am building a bungalow now, have the foundation up and am enclosing herewith plan of the ground floor.

“I would like some suggestions as to how to decorate the rooms so as to get them to look to the best advantage possible for the money spent.

“The body of the building is a buff clinker brick, also the veranda piers and the two chimneys.

“I am putting in one-quarter cut oak floors in the front hall, living room and dining room. Also using oak for all the woodwork in these three rooms. Had intended to stain the woodwork a mission color.

“Am using a clinker brick for the fireplace with a heavy oak shelf on top of it.”

Ans.—It is unfortunate that neither your letter nor floor plan give the facing



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Room 612, Architectural Dept., Grand Rapids, Mich.



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ANSWERS TO QUESTIONS—Continued



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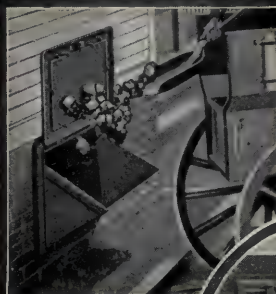
Chicago--Georgetown, Conn.--New York City--Kansas City, Mo.

of the house. We do not see how we can well advise you in regard to decoration of walls, etc., without this information. It is probable, too, that you have some furniture or rugs which should be considered in order to harmonize with the walls and woodwork. Perhaps you would prefer to write in again as to this.

In regard to white woodwork for bedrooms, we should prefer that finish, unless yellow oak furniture is to be used. It would be much better, however, to either stain or paint the floor borders a brown or mahogany color, or a dark water green. The white border would indeed be hard to keep in order and besides, a floor should always be darker in tone than the walls.

We will retain your sketch for further advice from you.

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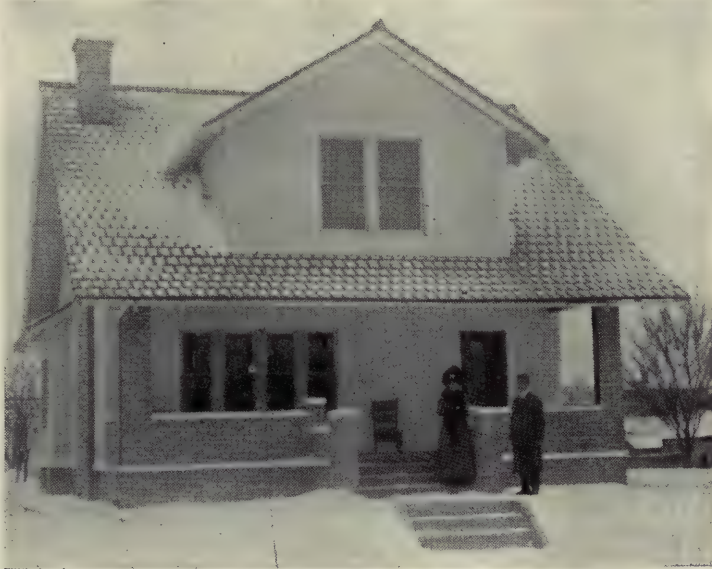
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Don't Be a Drudge.

 HE dictionary defines a drudge as "one who labors with toil and fatigue, or is employed in mean labor." Classified according to this definition, do not the bulk of the women who do their own housework fall into the category of drudges? And, as according to recent statistics only about six women in every hundred are able to have servants, isn't the situation rather appalling?

Drudgery may be physical or it may be mental, or it may be both. You may do comparatively light and easy domestic tasks with such mental rebellion that they are exhausting. You may work so hard with your muscles that you become stupid with fatigue and do not know whether you have a mind or not. Or you may hate the task with all your heart and use your muscles doggedly at the same time, and with all three ways of doing the work that is laid upon you are a drudge.

Such a state is pitiful. It reduces a large part of the fine flower of the race to the condition of the overworked cart horse, or of the mule on the treadmill. And the condition of the beast is preferable, for he is mercifully limited to the perception of the present, and is not tortured by the thought of what has been or might be.

How, in the face of hard work that must be done, often with insufficient muscular strength, rise above the numbing influence of toil? One difficulty with the domestic situation, almost everywhere is lack of intelligent understanding on the part of women of the essentials of homemaking and housekeeping. Women are

naturally conservative and they are largely governed by tradition. Their mothers' houses were kept in a certain way and they feel decadent if they depart from the standards set forty or fifty years ago. They apply to the suburban household the standard of the farm, or to the city apartment, equipped with every modern device, the theories which worked well in the detached house in a country town, with no water supply except in the kitchen. Every morning the lately risen sun shines on numberless women who, because they themselves were brought up to eat a hearty breakfast are forcing unwelcome porridge and warm biscuits down the throats of little children who have waked up disinclined for food, but whose appetites might be wooed by a shredded wheat biscuit with maple syrup, or by wafer-like slices of bread and butter. Time and aching backs go to the concoction of pies which the baker makes very much better, and which at their very best are not so palatable or so digestible as fresh fruit. The noonday Sunday dinner acquired a certain sanctity in the days when dinner at night was the exception and it was the one dinner which the man of the family ate at home. It persists despite the fact that the whole conception of Sunday has changed, that it makes it impossible for some of the family to go to church, and that it cuts the day in two for those who want to use it for recreation. The man who doesn't care to go to church for worship or edification, isn't going because he is waiting for his dinner. These are examples of the unintelligent attitude, put down at random, and many others will occur to the reader. But the first



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step toward the redemption of household work from drudgery is the intelligent consideration of the circumstances of the individual family, and the elimination of non-essentials. With the thought in mind that the physical essentials of life are abundant and digestible food, sufficient and suitable clothing, light, warmth and shelter, it ought not to be difficult to reduce these essentials to their lowest terms, not forgetting the fact that these terms are to more or less extent dependent upon the social circumstances of the family. This estimate of relative values is hardest of all to make in the community of medium size, with one social circle, easiest of all in the city, where the individual is of the smallest possible account. But the problem needs exactly the same sort of skill that every business man applies to his estimate of the costs of maintenance of his office, or his factory, or his transportation business, and it is in a matter of this sort that a woman may very well call upon her husband's trained sense of values.

But after this needed simplification has been achieved, all that has been done is to lessen physical labor. The task remains a task until it is inspired and informed with an underlying purpose. The end of domestic life is comfort, but what is the end of comfort. Comfort is only a means to efficiency. You give the dominant mind its opportunity by so satisfying the insistent body that it ceases to be a hindrance and becomes a helper. Conversely, the mind at rest reacts upon the body. It is the man's work to provide for the family and if you make him comfortable, you increase his efficiency. The physical labor of the home is the woman's share and when her mental attitude is one of interest and hope, her physical labor is so much the easier.

And after all it is the mental attitude that matters in all our living. Too many of us do not know how to live. We think of the processes of life as life, not as means to living. For that reason a great many people spend all their time getting ready to live, resting in the tiresome pursuit of the means, with no glimpse of the end. The end of life is development, and the way to it lies, for most of us, along

the elevation of our daily task from drudgery to the rank of an interesting, if not a delightful, occupation.

Turning and Twisting.

These are housecleaning days and while some prudent souls went over the linen closet and the blanket chest in February, a good many more left the work till a more convenient season. Notable economies are to be achieved by care in this direction. The average household, with a good supply to begin with, is kept going very well by the purchase each year of two tablecloths, a dozen napkins, half a dozen sheets and as many pillowcases. But to get on with no more new things than this care must be taken of the old ones. It pays to turn sheets at the first sign of wear in the middle. It also pays to make sheets at home and to get rather a light weight muslin, choosing exactly the same weight for pillowcases. Then the unworn parts of the sheets can be made into pillowcases. The making of sheets and pillowcases is a trifle, and the saving on a single sheet is at least twenty cents, to say nothing of the fact that the quality of the muslin you buy is better than the average material used for ready-made bed linen. If you indulge in linen sheets and pillowcases the saving is even more marked. Aside from the comfort of sheets three yards long they wear better as they are not torn or strained in the constant effort to pull them up.

Some people make their old tablecloths into napkins. This is a capital economy in the case of thin fine table linen, but napkins made from heavy table linen are neither good looking nor pleasant to use. But an old tablecloth in fair condition will make hemstitched covers for the sideboard and serving table, or for the bedrooms. If it is fairly heavy the odds and ends can be used for plate and tumbler doilies, either scalloped on the edges or finished with linen lace or lace braid.

Napkins which are past active service are not of much use, unless they are carefully darned and laid aside for occasional use at a pinch by the members of the family. Their best destination is in the emergency closet, where they will be of service in sickness. District nurses who work among the poor, are generally very

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is the only simple, practical and efficient small capacity refrigerating and ice-making machine. All working parts are hermetically sealed in a bronze shell. Has no parts that can get out of order. Its operation is simplicity itself—one motion turns the power and water on or off.

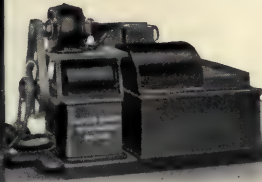
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Beaver Board bedroom in Mr. Jensina's house.
See letter above.



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Window Shades

Before you decide the shade question, go to the Brenlin dealer in your town, and have him show you the three popular priced grades of these now famous window shades.

For every important window choose the *Brenlin Unfilled* grade. Made of closely woven cloth, without the "filling" which in ordinary shades soon cracks and falls out in unsightly streaks and "pin holes," a Brenlin Unfilled shade will last longer and make your window look better than any other shade.

Sun won't fade this shade nor water spot it. It is supple—not stiff, yet always hangs straight and smooth, and *really shades*. Made in many artistic tones to harmonize with any decorative scheme. For windows 1 yd. wide by 2 yds. long, 75c. Special sizes and Brenlin Duplex—white one side, dark the other—made to order at proportionate prices.

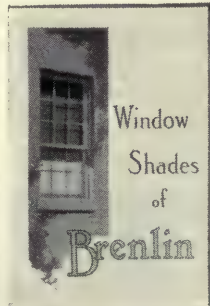
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It shows actual samples of Brenlin in all colors, and gives many helpful suggestions for the artistic treatment of your windows. With it we will send you the name of the Brenlin dealer in your town. CHAS. W. BRENNEMAN & Co., 202 Reading Road, Cincinnati, Ohio.

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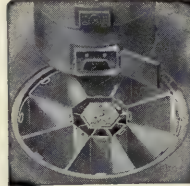
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HOUSEHOLD ECONOMICS—Continued

thankful for old table linen in any condition of dilapidation.

The worn blanket is another proposition. It too can be turned. Many old fashioned blankets have a seam down the middle, and the modern one is none the worse for it. A wide binding of cheese cloth, which can be removed when the blanket is washed, is a saving both of wear and of soil.



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It fills the basement and the whole house with Ash-Dust and is an absolutely unnecessary labor—dirty, tiresome and disgusting.

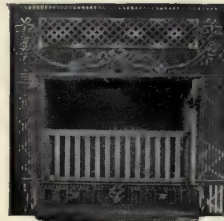
The SHARP Rotary Ash Receiver

receives the ashes direct from the heater by gravity, and holds the accumulation of 6 to 12 weeks. Dust tight, fire-proof, Sanitary; saves 90 per cent of the work. For every type of heater, in new or old buildings.

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Ferns for Table Decoration

FHOSE of us who live in steam-heated houses struggle vainly with our fern dishes in the winter time. The alteration of high and low temperatures incident to the average steam plant, added to the fumes of illuminating gas, limits the lifetime of the table fern to about a month. When we are wiser we shall give up the struggle and adopt the French fashion of a porcelain figure or group for the center of the table, accenting it by setting on a handsome piece of lace or embroidery.

But spring is our time of opportunity. The florist marks down his wares and, watching one's opportunity, one gets half a dozen or more thrifty little ferns for a quarter. Of the different sorts, the thick leaved holly fern is the most decorative, and grows to a very considerable size, responding gratefully to stimulation. Plant your mass of ferns in a low earthen dish, with plenty of drainage, and set that inside the fern dish. There is nothing prettier in the way of a fern dish than an oval lattice work dish of the ivory white Coburg ware. There is a great variety of dishes for flowers and ferns of this Coburg ware, some of them in sections, with places for a double row of flowers or foliage, but the general effect of most of them is rather finicky. One does not want the dinner table to suggest a formal flower garden. Another sort of receptacle which is charming for ferns is one of the dimin-

utive window boxes which come in either Italian terra cotta, at a high price, or in ivory tinted plaster at a low one. They have decorations in relief and are rather more than a foot long and perhaps five inches wide. Nothing brings out the charm of foliage so well as these warm ivory tones. Other pretty and inexpensive fern receptacles are low baskets in cream or gray green and shallow boxes of silver birch bark.

After the fires are out the little ferns thrive exceedingly and serve their purpose until flowers are available. Then is the time to repot them, giving each one a five or six-inch pot, sinking them in the earth in a shady place, giving them two or three times a week a watering with a solution of some good plant food. Black coffee poured around the roots is highly recommended, and might be worth trying. It would certainly do no harm. After a month out of doors the ferns are ready for the empty fireplaces in the house. Planted in wooden boxes, painted olive green, and used in relays they are a charming addition to the summer setting of the rooms, infinitely preferable to a dusty arrangement of never lighted logs.

The Gifts of May.

May is too often an austere month, whose sunny skies are out of harmony with her distinctly chilly winds. It is certain that the poets who have sung her charms lived in another climate than that



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which explains all this and tells you how to materially reduce the high cost of living—how to have better, more nourishing food—how to keep food longer without spoiling—how to cut down ice bills—how to guard against sickness—doctor's bills.



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TABLE CHAT—Continued

of the northern United States. But May brings, no matter what the temperature, some very agreeable things. Strawberries are at their best in mid and late May. Radishes are still crisp, lettuce is crisp and tender, cucumbers are big enough to be tempting, and the best salad tomatoes of the year come up from the south. With celery still attainable, with new cabbage in the offing, and with eggs abundant and cheap, we might call May the salad month.

of delicate people. So mayonnaise has its uses besides the pleasure it affords the palate.

For a French dressing the rule is three tablespoonsful of oil to one of lemon juice or vinegar. With mayonnaise there is no definite proportion of acid, but there must always be one egg yolk to each half pint of oil. The secret of a good mayonnaise apart from the goodness of the oil, is the icy coldness of the oil, egg and vinegar or lemon juice. If these have been on ice



TASTEFUL ARRANGEMENT OF RADISHES AND CUCUMBERS.

Mayonnaise or French Dressing.

The average American associates salads with mayonnaise. The taste for French dressing is confined to a few people. According to strict culinary standards, French dressing is the proper thing for green salads, mayonnaise for meat and fish salads. But few people conform to strict standards in these matters. Mayonnaise is, of course, more expensive than the other, and its making is attended with vicissitudes in the hands of many people. On the other hand mayonnaise disguises the taste of the oil better and can be eaten by people who find a French dressing nauseating. Moreover, the egg used in its making will absorb so much oil that the salad dressed with mayonnaise becomes a valuable vehicle for the introduction of much needed fat into the diet

for a sufficient length of time it is quite possible to put all the ingredients together in a cold bowl, and setting that in a pan of ice to make your mayonnaise in no time with a Dover egg beater. The writer has done it, but in the long run it is more trouble to chill the ingredients to the point required than to make the dressing in the ordinary way. If you have the misfortune to curdle your dressing, you can make a second bowl and mix it with the first. Or if you have unsweetened condensed milk at hand, a tablespoonful beaten into the curdled dressing will do the trick. Probably heavy cream would have the same effect.

Economies are possible in making mayonnaise. You can make half a pint of soft custard, omitting the sugar and using the yolks of two eggs, adding this when cold

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"Gaumer Lighting everywhere, follows
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have been found indispensable in thousands of homes where lighting fixtures are tastefully selected.

By day, Gaumer Fixtures form a pleasing harmony with the furniture and decoration; in the evening, Gaumer Lighting displays them to advantage. Our art-craftsmen are an acknowledged authority on hand wrought fixtures.

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to drive you out of doors, turn your porch into a cool, airy living room. Vudor Porch Shades will shut out the sun's heat, let in all the air and light you want, seclude you from passersby, and give you a delightful place to live both day and night.

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will last many seasons. They do not "stretch out," become irregular nor break on the edges. The raising cords do not curl up and catch in pulleys. Vudors are indelibly stained (not painted nor dipped) in pleasing colors to harmonize with your house. Do not confuse with ordinary bamboo screens. \$3 to \$10 equips the average porch.

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TABLE CHAT—Continued

to an equal quantity of mayonnaise, and only the epicure will notice much difference. Almost all caterers use a foundation of this sort for their dressing. Or you may make a boiled dressing by one of the rules found in every cookery book, although most of them use too much vinegar, and when it is cold stir in enough oil to give the dressing a distinctive flavor. In the case of economies of this sort it is well to season the dressing rather

thought necessary to soak them in salted water, it should be long enough beforehand to admit of their lying on the ice for an hour or two, and they should be sliced very thin. Many people like to eat radishes with them. Our illustration represents an individual serving of cucumbers, a dish of radishes being passed with them. The cucumbers are dressed with oil and vinegar and arranged around a tiny bunch of watercress. The radishes



SLICED SPICED BEEF WITH SALAD AND HORSE RADISH SAUCE.

more than for a regular mayonnaise.

Sour cream is often utilized for salad dressings. A very good dressing for potato salad, for cucumbers or for lettuce can be made by whipping together with an egg beater equal quantities of vinegar, unsweetened evaporated milk and oil. The Simon pure German potato salad is made from clarified goose fat, vinegar and milk.

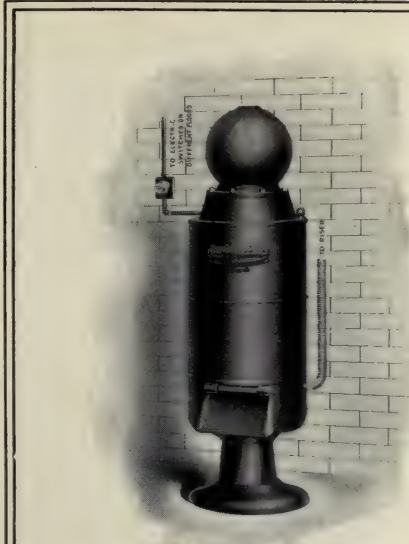
Serving Cucumbers.

It ought to be needless to remark that cucumbers should be crisp, were it not that limpness is so often their characteristic. If for the sake of digestion it is

are partially peeled and a little bit of green is left at the end.

Cucumber and Radish Salad.

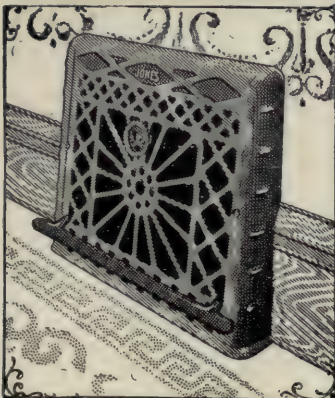
A very pretty luncheon salad was originated by one of our well known cooking schools a few years ago, for its unusual exhibition. A small cucumber is peeled and cut into thin slices, but the knife is not carried quite through, so the cucumber retains its shape. Wafer-like slices of radish, unpeeled, are slipped between the slices of cucumber and the whole is laid on a lettuce leaf and dressed with mayonnaise.



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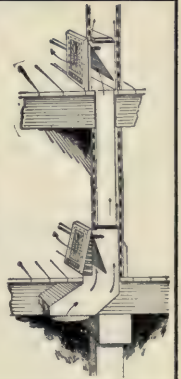
during the coldest weather may be secured by installing the "JONES" System of Heating, one principal of which is the heating of one room on two floors from the same basement pipe, insures not only a saving, but produces the results wanted.

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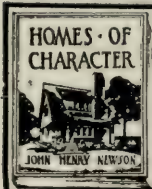
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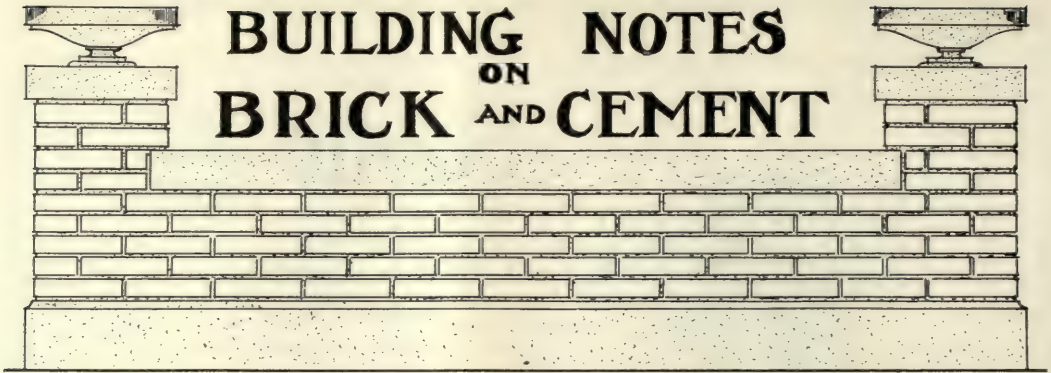


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JOHN HENRY NEWSON, (Inc.) Architect
1029 Williamson Building Cleveland, Ohio





Growth in Concrete Construction.



ALL indications point to the largest year in concrete construction since the introduction of Portland cement. This does not mean that other forms of building have decreased but that in all lines there is a substantial growth of which reinforced concrete construction has its full share. For many years the use of cement was limited to dams, sidewalks, and the simpler work.

Spectacular works give the greatest publicity to concrete construction. Big dams, tall skyscrapers, and huge factories are fit subjects for magazine articles and the speaker's platform, but the measure of the volume of concrete construction is dependent on the preponderant volume of small work. The greatest good to the greatest number lies in the development of the small uses.

The estimate of 1912 cement production and consumption, $3\frac{1}{2}$ million barrels more than in 1911, went largely into normal, healthy increase of small work, especially into small town and rural construction. In the latter field the surface has only been touched.

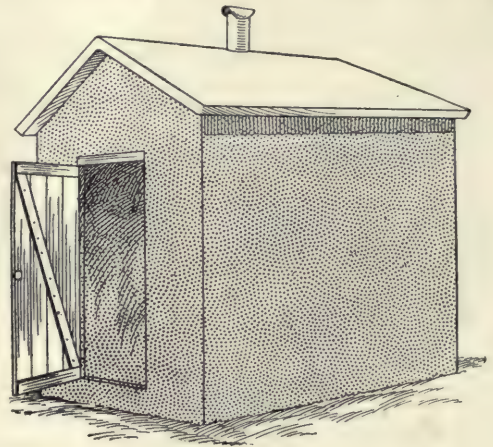
—*Cement Age.*

To Build a Reinforced-Concrete Smokehouse.

Many people continue the practice of smoking and preserving meats on their own premises, preferring the appetizing results of the old way to the modern chemically treated product, says Concrete-Cement Age. And when it comes to ways and means to insure the best results, concrete as usual takes first place. A smokehouse should retain the required quantity of smoke, exclude flies and other

vermin and should be fireproof. A building of concrete has all these good qualities as well as being thi-f-proof.

In constructing such a house ordinary lumber may be used for forms. The walls for a 5-ft. by 8-ft. building should be $4\frac{1}{2}$ in. thick and rest on a foundation, 8 in. wide and $2\frac{1}{2}$ ft. deep. The roof and floor should be $3\frac{1}{2}$ in. thick. The inside form is made first, then the outside erected,



layer by layer as the concrete is placed, thus avoiding much heavy lifting and giving perfect control of the reinforcement. The wall reinforcement consists of $\frac{3}{8}$ -in. rods, 8 in. long, spaced 18 in. in either direction. Similar rods laid flat in the concrete, and upon the inside and against the other rods are carried around the building, being bent around the corners and hooked together where they meet, thus making a very secure job. In constructing the roof, nail 2 by 4-in. rafters to the uprights of the inside forms, placing them 1 in. below the bottom of



St. Joseph's Parochial School, St. Joseph, Mich. Roofed with Asbestos "Century" Shingles. J. C. Schwerdt, Architect—John Wallace Sons Co., Contractors, both of St. Joseph.

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"The Roof that Outlives the Building"

Now you can get a proof and indestructible Asbestos "Century" Shingle roof at practically the same cost as a gray one. Specify *Veneered Red Shingles*. They have Indian Red face with gray back—uniform in texture—fire

Write for names of representative roofers who can supply Asbestos "Century" Shingles—and for Booklet, "Roofing: a Practical Talk."

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KNO-BURN METAL LATH

is a flat sheet of metal fabric with a weblike mesh that completely imbeds itself in the plaster. This form of construction produces a reinforced concrete-like wall. The plaster simply *can't* come off.

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for outside use is a metal fabric similar to KNO-BURN with parallel ribs that increase its strength and provide a substitute for furring. It has the same weblike plaster-gripping mesh that makes KNO-BURN so effective.

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OUR FREE Booklet 655 "Metal Lath for House Construction" is full of profitable pointers for home builders. Send for it today and convince yourself that Metal Lath inside and out means lifelong satisfaction and lasting economy in your new home.

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CEMENT—Continued

the concrete roof, the pitch being $1\frac{1}{2}$ ft. The rafters are sheathed with 1-in. boards and the work of laying the concrete begins at the cornice. The boards and studs must not be too close-fitting, to avoid damage from the swelling of the lumber by dampness.

The amount of material necessary to construct a house of the dimensions given would be approximately 10 bbl. of cement, 3 cu. yd. of sand, 6 cu. yd.

Homemade Concrete Mixer.

While going through the country I met one of those mechanical geniuses so often found on the farm. He had many labor-saving devices on his place and, among other things, he told me about laying a concrete floor for use as a feeding place for the hogs, and how quickly he had accomplished the work in making it. I then looked for his concrete mixer, for I knew that he must have something of the sort for doing this work. I learned that the machine was at one of the neighbors, where we went to see it. The mixer is a rare work of simplicity and economy. All that was purchased to build it was a pulley for the belt, every other part being found on his place. The mixing box is made of 1 by 8-in. boards, laid inside of two rims of corn-planter wheels. The gear around the box came from an old manure spreader, and the rest of the gearing from the two mentioned implements. The barrel supplies the water through the pipe. The truck was one used on an old gas engine.

The mixer is a great success, as the work done by it which I saw was of the best. The use of the machine requires some common sense; and as the builder had lots of that, he succeeded in constructing an efficient machine at a very low cost.—*Popular Mechanics*.

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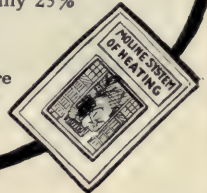
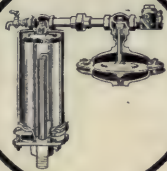
Requires no more pressure than there is in your tea-kettle and is just as simple. Requires no pumps or other expensive apparatus to get out of order. Will deliver heat to the farthest radiator within 30 minutes of starting a fresh fire. Is safer, more economical, more satisfactory than the best steam or hot water plant and will require fully 25% less fuel.

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which explains *how* and *why* the Moline System is better and more economical. We'll also send you details of our *Free Engineering Service* which assures you of a properly installed heating plant. Write today.

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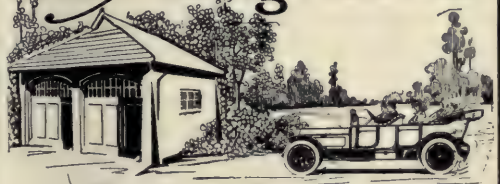
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"EVERY HANGER
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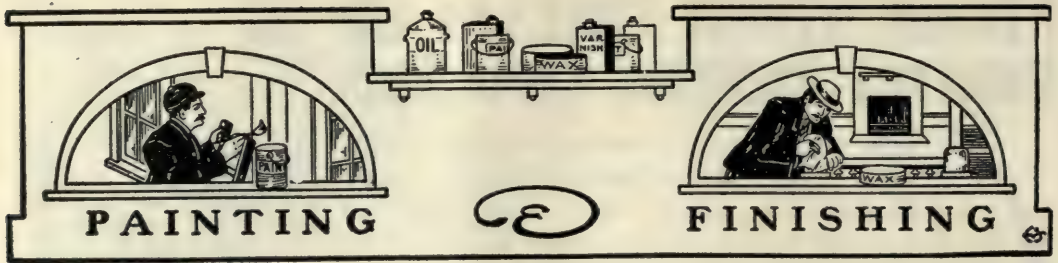
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Regilding Picture Frames.



FINE picture frame, gilded, is the result of much labor and time, and cannot be done in a hurry, unless a very indifferent job will satisfy.

Taking the old picture frame, saying it is in good condition as to its foundation, only the gilding being off or marred, the first thing to do is to clean off all dirt, which may be done with white soap and water, doing this very carefully so as not to injure the undercoating material, which is built up of glue and whitening, and over which has been laid many coats of burnish size. The burnish gold size used by the frame maker consists of such materials as pipe clay, red chalk, black lead or plumbago, suet and bullock's blood. These ingredients have each a different office to fulfill, one helps give brilliancy to the burnish, another to the mellowness and smoothness, and so on. The burnish size made from these is about like soft butter, but this has to be thinned down somewhat with gold size, to about the consistency of cream. It is made barely warm and is laid on very carefully with a soft hair brush, avoiding all laps or marks, and four to eight coats are applied, each coat being dry before the next is applied. When all is done the surface is washed with clean water and a sponge, and any slight roughness must be carefully removed by rubbing. Before the work is quite dry it is rubbed, on those parts to be matt, with a piece of woollen cloth; but the parts that are to be brilliant have another coat of size applied.

Frames dirty with fly specks, etc., may be made clean by washing off with turpentine. Water with a little alcohol in it is also good.

If it is desired to varnish over the burnished gilt use very thin white shellac varnish.—Paint and Oil Dealer.

Possibilities of Concrete Decoration.

A lady stood watching the cement finishers work in one of the sun porches of her new house. She took the plume-like branch of one of the graceful shrubs growing in the yard, laid it on the newly-troweled surface, near the border, and instructed the finisher to "pat it down" with his trowel. With some natural hesitation at seeing his newly-finished work apparently disfigured, he complied. In a few minutes, the plumed branch was lifted out. The stem end was raised first, and the entire branch "peeled out." The impress of the branch broke up in a pleasing way the monotony of the surface. The workman saw the natural beauty of the decoration, and took it up enthusiastically, repeating the impress as a border completely around the sun porch.

This opens up an interesting possibility in concrete surface decoration. Of course, under many conditions this method would result in depressions which would collect dirt, and be unsightly and undesirable in many ways. On the other hand, there is no reason why this same idea could not be developed further by filling any desired impress in concrete with a colored cement and sand mixture.

Inlaid tile are used with most excellent results to decorate concrete. A similar end might be arrived at by leaving in the concrete finish openings of various shape and design which could be filled with a mortar of any color or texture. The matter merits consideration.

Producing a Frosted Effect on Glass.

I have a number of glass transoms which I would like to paint opaque, producing a frosted effect. What is the best method of doing this?

With two-thirds raw boiled linseed oil and one-third pale drying japan, mix finely ground whiting to a creamy consist-



CEILING—S W Flat-Tone, Ivory
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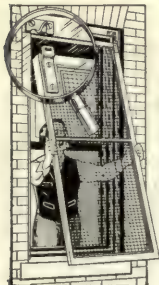
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PAINTING AND FINISHING—Continued

ency and then thin with turpentine to a brushing condition, using a two and one-half inch camel's hair brush to apply the whitening mixture.

Then with a ball of cotton waste encased in cloth, go over the glass coated with the mixture, tapping the color softly to bring out the frosted appearance. Better try the process first on a small piece of glass—Dutch Boy Painter.

Causes for Discoloration of White Paint.

C. E. D. We have your letter on the subject of white paint for interior decorations and answering your question as to what causes discoloration of white paint, will say the first thing we bring to your notice is the fact that it is neither the white lead nor the zinc which has a tendency to turn yellow, but rather the linseed oil which may be used. To avoid this tendency, the painter uses a small proportion of linseed oil and a large proportion of turpentine. If he uses only these two vehicles, and if the turpentine is greatly in excess, the result will be a flat finish. One effect of oil is to produce a gloss. To overcome the flatness, in case you should decide to use turpentine in excess, you should use a white enamel varnish mixed in with the paint. This will give you the gloss and still protect the paint from turning yellow.

The chief difference in result, between white lead and zinc, is that the zinc dries hard and brittle and under changes of temperature has a tendency to crack and perhaps scale off. Zinc is also a clearer, colder white than white lead. Very few people care for the extreme cold white, but prefer the softer white of white lead.

We hope these suggestions will enable you to select intelligently what you should use to get the desired results. If, however, there is any other information we can give you, please feel perfectly free to write us about it.

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For all concrete walls, use *Lowe Brothers Concrete and Cement Coating*. It is impervious to moisture, retards alkali action, and prevents discoloration. For concrete floors our *Elastic Cement Floor Finish* is the most satisfactory finish.

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Heating, Lighting and Plumbing

Heating the Floors.



EATING a building by means of steam pipes embedded in the concrete floor has been successfully accomplished in the chassis testing building of the Moline Automobile Co., at Moline, Ill. The structure is 120 ft. long by 60 ft. wide, with door openings extending completely across the ends of the building.

The workmen are obliged frequently to lie on the floor in making necessary repairs and adjustments and on this account it was desired to keep the floor surface comfortably warm. To accomplish this, 1¼-in. steam pipes, spaced 42 in. on centers were laid 2 in. below the surface of the 6-in. floor slab. The concrete is reinforced locally against cracking, due to the expansion of the steam pipes, by corrugated, galvanized iron pipes inclosing the former.

Below the floor slab, 8 in. of cinder fill are placed as an insulating material. It is stated that with only five small metal radiators additional, it is possible to obtain a uniform temperature of from 60 to 70 deg. F., throughout the building.

—*Heating and Ventilating Magazine.*

City to Heat Its Houses With Electricity.

The city of Seattle, through its municipal lighting department, has made provision for heating the homes of her citizens by installing electrical heating coils under hot-water boilers and individual radiators in the houses of those who order the service. The heaters are automatically controlled by a device which shuts off the current when the heat reaches the desired degree and turns it on again when the temperature falls below a certain degree. It is said that these heaters provide a satisfactory amount of heat at a less cost than coal.

—*Popular Mechanics.*

Passing of Electric Heaters on Cars.

On account of the high cost of keeping the interior of street cars warm with electric heaters during cold weather there is a growing tendency to discontinue this form of heating, except in localities where the weather conditions are such that the cars can be kept comfortable with a comparatively small amount of heat. It has been demonstrated that less than 10 per cent of the fuel consumed at the power house appears as heat in the cars, and that it also requires more electric current to keep a car warm in extremely cold weather than is necessary to propel the car. The electric heater also is the cause of not infrequent complaints, as this heater cannot be installed in a position most advantageous to the perfect distribution of the heat, such as is possible by using air, steam, or hot-water heaters. The officials of several electric roads, upon which cars heated by various systems have been tried, claim that heating the cars with air or water circulation is a great economy and also far superior to the electric heater, as far as the comfort of the public is concerned.

—*Popular Mechanics.*

How to Use a Gas Range.

When lighting the top burners, turn the burner on full and light at the back of the burner. This enables the burner to fill with gas and prevents lighting back in air mixer, commonly referred to as "popping."

The point of the flame should be just high enough to touch or impinge on the bottom of the cooking vessels. In boiling water it should always be remembered that water boils at 212° F. and it is impossible to heat it above that temperature.

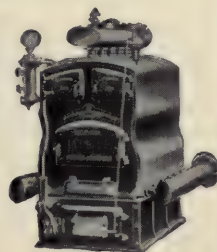
Many people are under the impression that boiling at a gallop shortens the time of cooking, but such is not the case. The



Residence of Mrs. Mary A. Reardon, Wellesey, Mass. Mr. Clinton Noble, Boston, Mass., architect.
Comfortably and economically heated with a Pierce American Steam Boiler and twenty-two radiators.

You pay for a Pierce Heating Equipment but once. But what you pay buys—

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Two hundred thousand installations of

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in all parts of the country, in all kinds of buildings, support these statements. Pierce Boilers are made in so many styles and sizes that every heating problem may be efficiently and economically met. Ask any competent steamfitter to tell you about Pierce Boilers and give you the cost to install the size and style your house requires.

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A Primer for the man who is about to build a new house or make an old house comfortable.

Send for this Heat Primer
A book for all who were cold last winter, as well as those who paid too much for their heat. It's free.

HEATING, LIGHTING AND PLUMBING—Continued

evaporation of the water is accelerated and makes it necessary to replenish the supply of water. This makes a demand for more fuel, which is an additional expense for heating the water thus supplied.

There is an old saying, "Matches are cheaper than gas." The greatest economy is exercised when burners are turned completely off when not in use and re-lighted next time they are required.

How can I bake successfully on the gas range? Always light the oven ten minutes before using. This method involves no waste of gas, as, if the article is put into a cold oven, the cooking will take just so much longer and the results will not be so good.

Use tin pans, not sheet iron nor agate, as they absorb the heat and are liable to burn the food at the bottom and sides before it is done. The heat of the gas range oven is much more intense and direct than that of the coal range.

Do not put pans on the bottom of oven—it prevents the proper heat circulation. Always use the oven racks.

Regulate the burners according to the kind of baking. If recipe calls for a moderate oven, reduce the flame about one-half when the pans are put in. For a quick oven, keep burners lighted during all, or nearly all, of the baking. It is important to bear in mind that it takes less time to bake in a gas range than in a coal range.

In baking bread the gas may be turned entirely off ten minutes before taking from the oven. The heat retained in the oven will "bake out." Close the damper in the flue pipe when baking; this holds the heat.

How can I broil successfully on a gas range? Meat suitable for broiling should be fairly tender and surrounded by fat, otherwise the result will be hard and dry. The edge of the meat should be cut through in several places to prevent it from curling up, as the outer skin contracts from the heat. No seasoning should be added until the meat is ready to serve, as salt toughens the meat and draws out the juice. Heat the oven ten minutes before broiling or meat will simmer. Place the meat about two inches from the flame, always leaving the oven door open when broiling. This is important both for the choice flavor of the meat and to prevent burning and smoke. Sear first one side of the meat and then the other so that the juices of the meat are retained. Have the meat platter hot when the steak is put on, first adding the seasoning.

Always leave the oven doors open after baking and broiling; this allows the steam to escape and prevents rusting.

How can I keep food warm on a gas range? Heat the oven for ten minutes, then turn out the gas. Put the food in the oven. The oven will stay hot for at least twenty minutes.

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SPLINTERS AND SHAVINGS

Hardwood Flooring or Carpets.

By W. L. Claffey.



IN recent years, the hardwood floor is taking the place of carpets to such an extent that it is a very uncommon thing to see the old fashioned carpet that covers the entire floor. Carpets have had their day. The carpet is the champion collector of dust and germs. To keep a carpet thoroughly sanitary it would be necessary to wash it or steam it every week or two and, of course, this cannot be done, so the best thing is to get rid of the carpet.

The ordinary home builder is often misled in regard to prices of flooring. Clear quartered (best grade) oak flooring, $\frac{3}{8}$ -inch thick by $1\frac{1}{2}$ or 2-inch face can be bought, laid and polished for \$1.00 per carpet yard. This is much less than the price of good carpet. Oak flooring tones up a house and exhibits more taste than any carpet ever could.

Three-eighth-inch thickness, after being laid, has all the appearance of thicker stock. A little more care is required to have the sub-floor even than when the $\frac{13}{16}$ -inch thickness is laid. In the $\frac{3}{8}$ -inch only two widths are made, namely, $1\frac{1}{2}$ -inch face and 2-inch face. Comparing the prices of the two thicknesses— $\frac{3}{8}$ -inch is about 40% cheaper than $\frac{13}{16}$ -inch."

The $\frac{3}{8}$ -inch thickness is used very extensively to cover all pine floors in old homes. All one needs to do is to rip off the quarter round trim, level off the sub-floor, and lay the $\frac{3}{8}$ -inch oak flooring at right angles to the old floor. New bungalows and all classes of homes and apartment buildings are using $\frac{3}{8}$ -inch thickness with marked success.

When one enters a home where hardwood flooring is used, their attention is immediately attracted by its handsome appearance.

A visit to the rug department of any department store is conclusive proof that

rugs are now taking the place of carpets, indicating that the hardwood floors have brought this about.

About Slate and Tile Roofs.

A few years ago, slate, when used, it was either of the densest and most evenly selected black, as smooth in surface and texture and as thin as was possible to be obtained, or—this in the period of the Mansard roof house—it was sometimes cut to hexagonal, diamond or other forms of geometrical shape, and laid in alternate layers of strata of contrasting colors generally such as black or red. Today—largely through missionary propaganda and advertising efforts, all this has been changed. The endeavor now is to obtain a slate roof of irregular texture, and of varied color and thickness. It has been shown how, in English and other foreign roofing of older times, that the slate was selected and laid so that the heavier larger pieces were around the eaves and then were nicely graduated in size and thickness as the roof neared the ridge course, where the smallest and thinnest slates were used. Thus beauty was obtained from irregularly cut slate, in the resulting charm of texture and softening of shadows upon the roof. A method of mixing slate so as to use the varying colors of different qualities upon the same roof, is by employing mottled purple and green with the solid purple and green slate, for instance, to blend the two colors together, or gray and green upon the same roof, along with other combinations available within the scope of the material. Of course, either of these methods adds expense of assorting and handling, and this expense is increased when an attempt is made to grade and select the slates for varying rows for their thickness and size.

Tile should never be employed on a house with walls clap-boarded, or shingled in wood, as it invariably appears over heavy for the construction beneath. On a plaster house it seems more possible. On a brick, cement or stone house this

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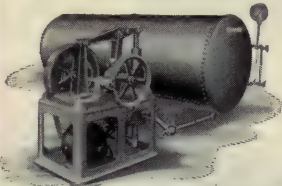
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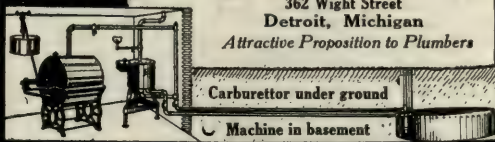
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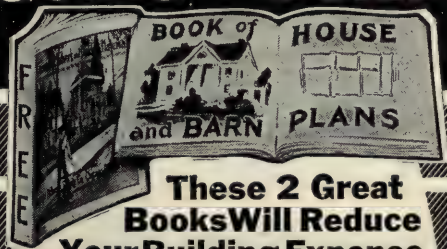
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material is always appropriate, provided that a proper scale is kept in mind from the beginning, and insisted upon by the designer. As a rule, the rough Spanish or Italian shapes are crude and large for any house except one of unusual size; and the ridges and lines they form along the roof are much more "nervous" than the simple horizontal emphasis to be obtained by the use of shingle tile, or some of the larger plain flat shapes.

Abroad, tiling is laid up in all sorts of various ways, with lines sloping diagonally up and down the roof around curving valleys and cheeks of dormers, and over rolling roof ridges. This sort of work is particularly to be found in Germany, northern Italy, and some of the old Austrian work; and modern German craftsmen are beginning to revive these picturesque, irregular methods of tile-laying.

The selection of tile for a roof should be undertaken only after the most care-

ful consideration and thought, because it is much more difficult to secure it in the sizes and shapes best suited to buildings of various types or sizes. Whereas slates come commercially of a size that is immediately available for the ordinary dwelling, this is not true of tile, which is generally made overlarge and so crude in scale as to prohibit being used on the small structure. A tile generally known as "shingle tile" has the smallest texture of unit when used upon the roof of the small house, and yet these tiles happen to be generally among the most expensive to lay and buy, and also—on account of their construction—among the most difficult to take out and replace when such an act becomes necessary or advisable. The beauty of the old tile roofs in Spain, Italy and France comes from the wide variety of color; often the tiles are as yellow as the strongest ochre pigments.—*Frank Choteau Brown, in House and Gardens.*

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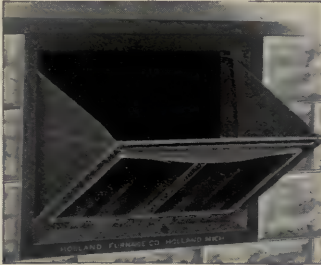
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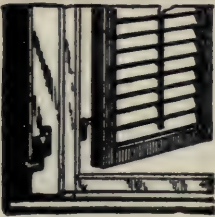
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The booklet of the Ashley Sewage Disposal System, describing and illustrating their device for disposing of Sewage Waste from residences and public buildings where there are no sewers, is extremely interesting reading for all suburban and country dwellers. The Ashley System not only disposes of Sewage, but purifies it, so as to protect wells, streams, etc., as the Septic Tank does not. It is easy to install, and not expensive. It is out of sight, and so has the advantage over other systems. It needs but little attention, an hour or two a year being sufficient for residential plants. Among the illustrations of homes where the Ashley System has been installed we note the beautiful summer home of John Washburn at Minnetonka, who is unqualified in his endorsement. We advise sending for this literature, published by the Ashley House Sewage Disposal Co., Morgan Park, Chicago.

* * *

An attractive little book that has just been called to our attention is one on the proper treatment for floors, woodwork and furniture by S. C. Johnson of Racine, Wis.

Not only does it contain a specification for the finishing of same, but for the benefit of those who are not familiar with

the various kinds of woods, the different shades of stain, etc., small cuts are illustrated showing the shade produced after the finish has been applied, and better still, photographs of interiors tend to make this a very interesting little book, especially to those who contemplate building this spring or any refinishing, either on floor, woodwork or furniture. A copy of this and samples of the woodwork will be sent on request.

* * *

The Honeywell Heating Specialty Co., Wabash, Ind., issue their 1913 edition of their book on Properly Installing the Honeywell Method of Hot Water Heating. The book is indexed and besides the general information and illustrations, contains tables of climatic temperatures and altitudes and affords a valuable compendium of information to those interested in installing heating systems.


* * *

The eleventh impression of William Arthur's New Building Estimator, without a doubt the most popular book published on calculating the cost of building construction, is just off the press.

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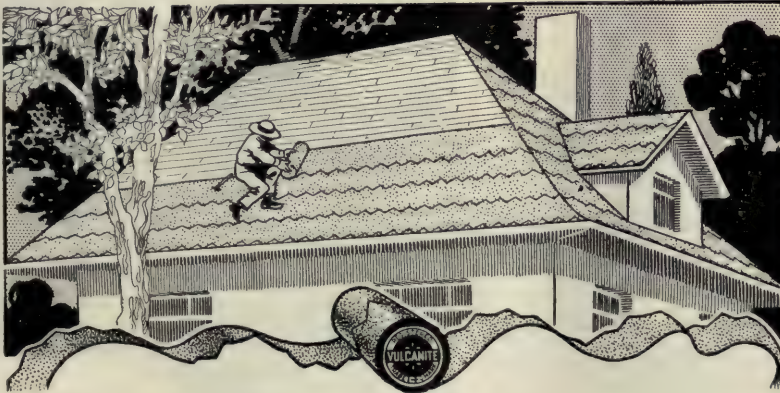
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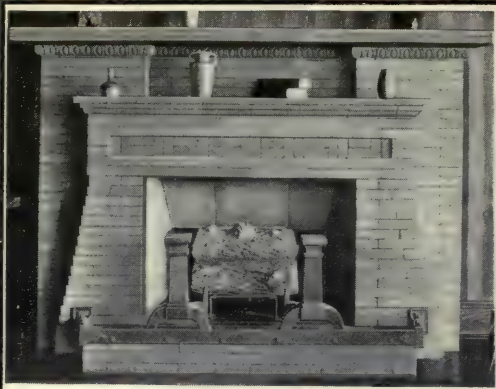
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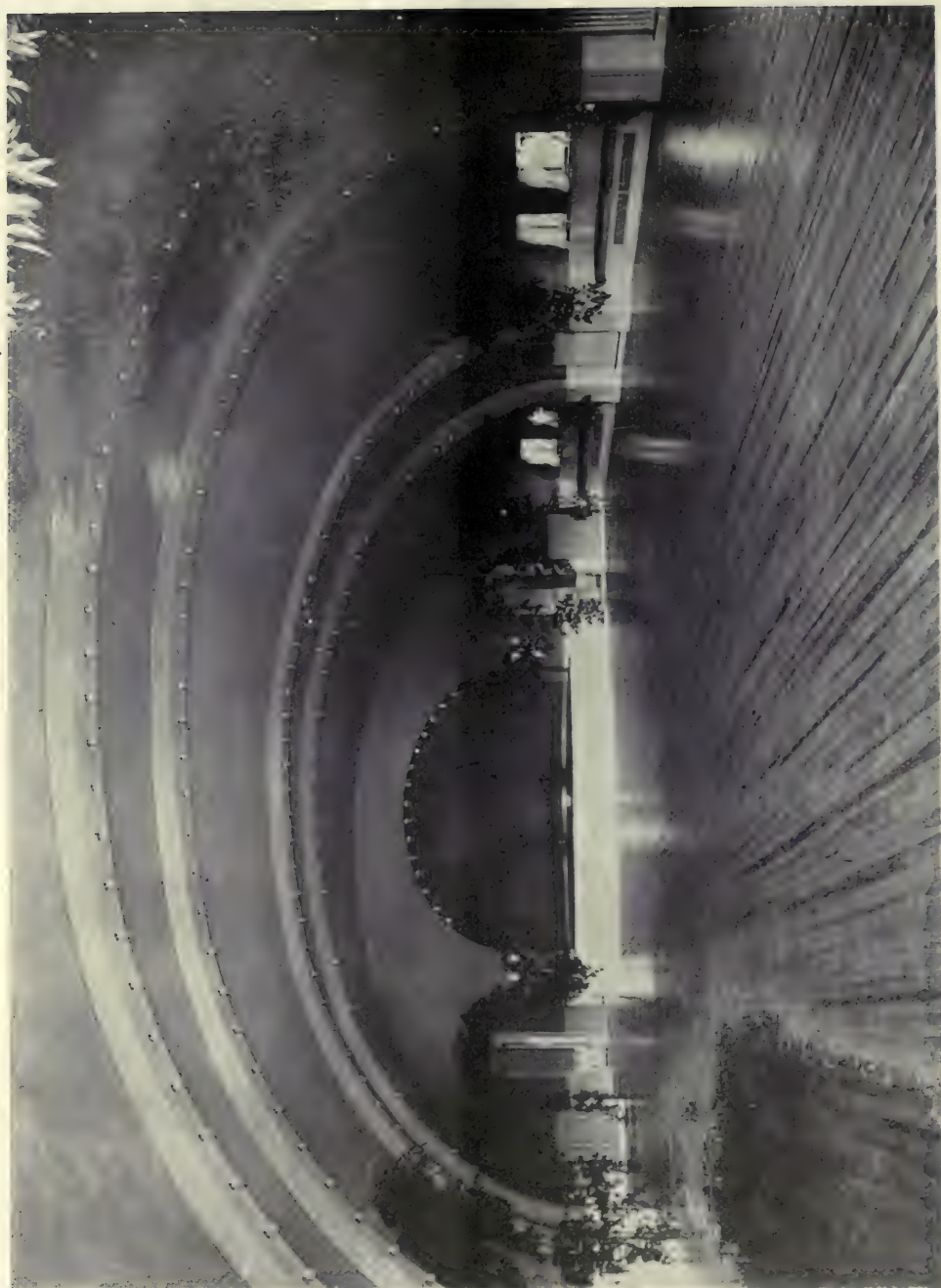
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BALL ROOM IN THE GEORGE W. PARTRIDGE RESIDENCE, MINNEAPOLIS.

KEITH'S MAGAZINE

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No. 6



BUNGALOW OF WM. BARNES, JR., ALBANY, N. Y.—MARCUS T. REYNOLDS, ARCHITECT.

The Individual Note in the House

By E. I. Farrington



HERE used to be much in the public prints about the personal equation, which often meant little but sometimes much. It is the same in the planning and building of a house. The owner or his wife may have many ideas about what the house ought to contain, all of which are conventional and trite, or, on the other hand, may have suggestions which will fairly lift the house out of the level of the commonplace

and stamp it with distinct individuality.

The individual note is one of the most charming features of houses one occasionally visits. It is true that the credit sometimes belongs to the architect alone, that the individuality which is expressed is that of the designer, but there are other instances, fortunately, where the architect has been capable of developing the thoughts of the owners in a most delightful way, so that the house makes a per-

flectly natural background for the latter's personalities.

In Illustration No. 1 the individual note has been struck in a felicitous manner. Doors and doorway are architectural assets which have been prized all down through the centuries. Architects love to fall back on colonial designs, even when fitting out modern dwellings.

In this case a very modest entrance is

struck. There is a knocker on this door, of course, although if one looks carefully he will find an electric button at the side for actual use.

However it may be secured, this individual note is expressed in that which is unconventional and yet neither bizarre nor tawdry. Take the fireplace in Illustration No. 2 as an example. Quite unusual in its treatment, there is no sugges-



FIREPLACE WITH INDIVIDUAL CHARACTER.

so delightful that the eye keeps returning to it. Probably the arrangement of the side windows and the hood have much to do with the total effectiveness, but the seats at the side surely help and the lantern is not to be overlooked. The door itself is charmingly designed—it is not a common door. Yet the reader should not understand that good doors must be made to order. Much attention has been given ready-made doors of late years and among them are some which will fit into almost any scheme without smothering the individual note, if it has fortunately been

tion or inharmony or straining for odd effects. It is in perfect keeping with the modest living room and does not dominate the room to an oppressive degree, yet it gives the whole apartment character.

This fireplace opens into a chimney built outside the house like many others, but instead of being made square in the customary way, the lines are expanded to provide these diagonal walls in which small windows are set. The hearth is but a little wider than the fireplace opening, but there is a wide stretch of tiling on

each side. This arrangement gives a broad shelf, stained the same color as the other woodwork, while above it is a painted panel occupying all the space between the windows. The dainty curtains at the little windows soften the light which falls on the painting and the mantel is purposely kept free of useless incumbrances, which would rob the charmingly designed fireplace of its quiet dignity. Whatever the rest of the house may be like, this corner is certainly a success.

Illustration No. 3 is similar in character, although showing a fireplace quite different in design. The house is entirely modern, yet there is a pleasant if subtle suggestion of old fashioned comfort in this fireplace, recessed as it is, with an ample opening and a heavy cross beam at the top. The individual note here is pronounced. I can almost fancy a good wife dreaming it out, if she be imaginative enough, or at least impressing the architect with the fact that she must have a fireplace with the old-time charm, leaving him to puzzle out the problem of making it fit into a strictly up-to-date architectural scheme. The design is simplicity itself. The bricks are red, pointed off in white mortar and laid with a running bond in the ordinary manner. Yet the inglenook suggestion, the square lines, the mass of brick and the heavy timber give it undeniable character and charm.

People who find themselves in houses with double front doors such as were made use of some years ago need not tolerate them longer if willing to pay fifty or seventy-five dollars for a modern form of construction. The old draught-breeding doors may be removed and a heavy single door substituted. Of course it will not be wide enough to fill the opening, but a panel with windows may be set on each side. This seems most conventional, to be sure, but if the windows are confined to the upper part of the panel, fitted with small panes of glass and the door



Old-Fashioned Comfort in This Recessed Fireplace.

chosen with care, an excellent effect may be obtained, and that with stock material. All depends upon whether one has this capacity for doing that which is not commonplace.

When the average person tries to think up some way of giving character to a new house, he or she usually settles upon a built-in window seat and some other form of built-in furniture, probably a china closet or a bookcase. As a result these things are almost as conventional as any other feature, but even so, it is possible to find the individual note if one has patience and imagination enough. It has been done, as witness the china closet in Illustration No. 4. This closet is small, you see, and simple. As a matter of fact, it faces into the dining room of a modest bungalow. The whole scheme is interesting, for the china closet is nicely balanced on the opposite side of the entrance hall by a built-in bookcase of the same proportions and design. Together, they give

a little desirable seclusion to the stairway, and help to define the lines of the hall.

There are several points about this unconventional plan worth calling attention to. First, space is saved which otherwise

door is excellent, full better in this connection, probably, than leaded glass. The frosted electric light globe at the side of the post is not to be overlooked. Presumably there is a similar fixture beside the bookcase to illumine the titles of the



RECESSED STAIR AND BUILT-IN CHINA CLOSET IN OAK PARK BUNGALOW.

would be wasted. Second, a feeling of privacy is secured, more apparent than real, to be sure, but still worth working for. Third, the use of carefully selected and skillfully treated wood in this conspicuous way adds much to the charm of the rooms. Cypress, stained, could be used effectively in this manner. The arrangement of the glass in the china closet

books when one wishes to make a selection after dark. Thoughtful little touches like these help much in emphasizing the individual note in the house. This arrangement is so simple and so practical that doubtless it will be widely copied, especially in houses of distinctly modern construction where inside doors are not greatly in evidence.



BUILT-IN BOOKCASE WHICH IS INTEGRAL PART OF SETTING.

It is quite possible to overdo the matter of built-in furniture, though. When there is too much of it, one wearies of its monotony. It is pleasant to move one's furniture about, once in a while, to look at it from a new angle and even sometimes to substitute new pieces for old, but with built-in furniture, however artistic, once in place it is there to stay. In apartment houses and flats this is all well enough. Families may come and go like birds of passage, as they often do, but the furniture stays on forever, or at least as long as the house stands. The landlord is pleased because less damage is done by the movers, and the tenants are satisfied because their loads are smaller and the

bills accordingly less. In houses lived in by their owners, who expect to spend many years there, the situation is different, so that one does well to pause when tempted to yield very far to the built-in fad.

In our fifth and final illustration, however, we have a type of built-in bookcase which expresses a delightful note of individuality and is fully justified by its position, like the china closet in No. 4. It is not obtrusive and does not intrude upon the floor space. As a matter of fact, is an integral part of a bit of splendid architectural planning, the stained glass windows, the curious electric globes, the brick columns and all the rest marking

the finished work of an architect whose individuality has been impressed upon many houses in the middle west.

This bookcase, quite apart from its setting, is beautiful in its severity. The perfectly plain doors and straight lines are a rebuke to those who find beauty only in heavy ornamentation and tortured embellishments. A member of the New York art commission likes to talk in homely language about the warts and other excrescences on the legs of tables and chairs such as are found in many homes, seeking to impress people with the fact that beauty is most to be admired when unadorned. In the case illustrated, the doors are really an architectural feature. To have made them of glass would have destroyed the individual note as effectually as to have glued on a piece of machine carving. In most instances, and this fact may well be remembered, it is better not to have doors of any kind on a book case, unless for decorative effect. Books deteriorate less rapidly when exposed to the air than when shut up. So don't put on doors to protect the books.

There are many other ways in which it is possible to strike an individual note. Most often it is attempted in the wall dec-

orations, but all too frequently the result is a flat failure. It is a difficult matter to secure original effects which are not bizarre or else too elaborate and complex to express the best of taste. Many people waste money and thought in a puerile effort to obtain unusual schemes of wall treatment, yet occasionally someone finds the way to success by such a simple process as using stock doors for paneling, setting them side by side, or employing decorative canvas and marking it off with cypress strips. It is quite possible to express individuality with simple means and at small expense. Many costly houses are as characterless as a paving stone.

Even the floor sometimes offers unexpected opportunities. It has been discovered, for example, that stenciling can be employed on a floor border almost as satisfactorily as on a wall and home-makers have secured striking and quite unconventional effects in this way. Stencils ready for use may be purchased or they may be ordered or made to fit in with a special scheme of decoration. However it may be obtained, the individual note is well worth striving for, in modest homes as well as in those which are more pretentious.

An English Cottage

By Kate Randall



THE pretty English cottage illustrated impels us to wonder why we have ever departed from the English models. The lines are so good and there is such an air of comfort and stability. This house is a new one, but it fits into its beautiful setting as though born and raised with the oaks.

The entrance is at the side and the whole front is one long living room, with windows to the north, east and west. Back of the entrance hall, a door at the

foot of the main stairway leads into a sun parlor or breakfast room. There are also doors from the living room and dining room into this little room, which is sunny and attractive. The east side consists entirely of glass, but against the west wall there is built a most artistic small fountain, with a basin below. The balance of the wall space, not taken up with doors, is covered with green lattice, on which vines are trained and there are small window boxes for ferns and other greenery.



SUCH AN AIR OF COMFORT AND STABILITY.



BORN AND RAISED WITH THE BEAUTIFUL OAKS.

The furniture is reed. The oblong reed table is first covered with flowered chintz, and then with heavy plate glass, the same chintz appearing in cushions for the chairs. The color scheme of the whole lower floor is a soft gray, with dark fumed oak woodwork; the draperies of the different rooms are sunfast fabrics in different colors. The walls of the living

The artist who designed the fountain in the breakfast room also designed the fine fireplace in the living room. The shelf itself is of heavy oak, but framing the opening below and on the hearth are tiles that exactly reproduce uneven blocks of old English sandstone. And the English touch is also continued in two high-backed winged chairs, with fine old



REAR VIEW OF THE ENGLISH COTTAGE.

room, dining room and den are papered with plain gray, and these rooms have heavy mouldings of fumed oak, some eight inches wide, set close to the ceiling, except for this finish the side walls are unbroken. The hall paper is an indistinct foliage of the soft gray and white. The floors of the porches, hall and breakfast room are red tile, about ten inches square. All the other floors dark oak.

The dining room is also an east room. The whole east side is given up to windows and glass doors into the garden. The furniture, too, is old oak, with Dutch blue draperies.

chintz. Long glass doors on all sides most skillfully frame the beautiful views of the distant mountains and the oak covered hills, and make them a very charming part in the decoration of this beautiful room.

On the second floor the woodwork is white enamel, but the soft gray walls still prevail, yet the bed rooms are very bright and cheerful in gay flowered chintz. The sloping roof, with its many angles, make it possible to have closets, drawers and cupboards without end, and there are many other conveniences in this very charming English cottage.

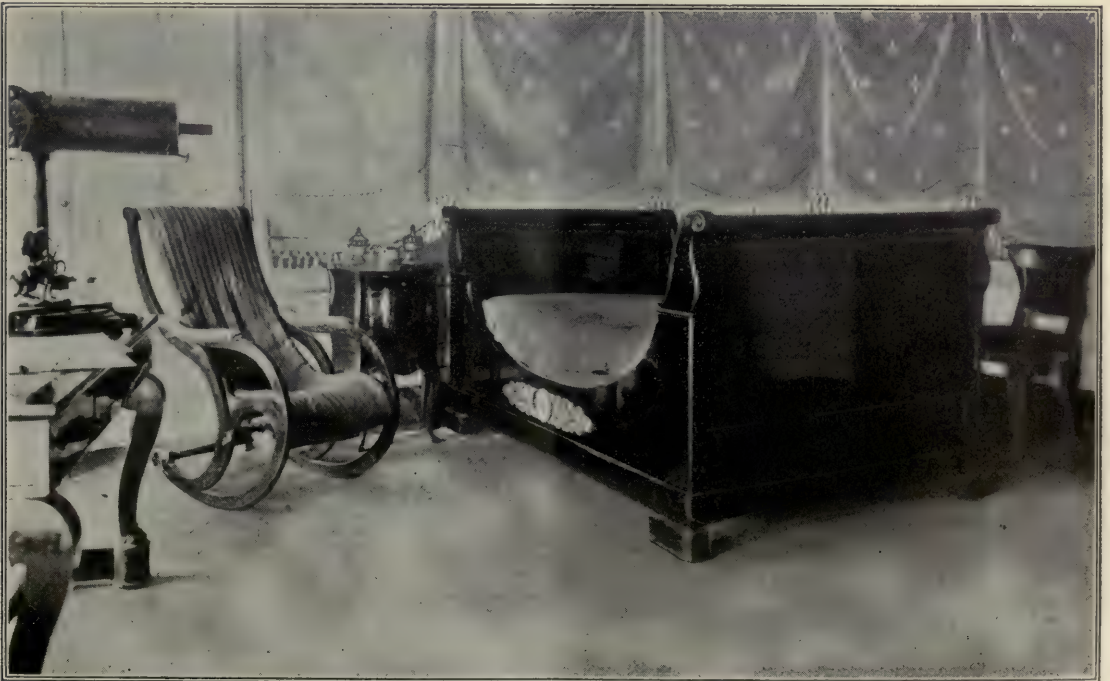
Interesting Glimpses of Napoleon's Home at Elba

SAN MARTINO, the dwelling of Napoleon I on the Island of Elba, was recently sold and, it is believed will be remodeled to suit the purchaser. Thus will pass one of the most interesting relics of Napoleon's career, for the house contained many pieces of furniture used by the exiled emperor during his residence, as well as many of the original frescoes and decorations. The house, which was not large, was used by Napoleon as a private residence; a more pretentious building, known as the Palace of the Mulini, being reserved for formal functions, of which, despite his exile, Napoleon held quite a number. The palace retains little of its former character at this time and is of little interest to the relic-hunter.

The Villa of San Martino, however, has always been visited by tourists, although strangely enough, very few French people were attracted to it. On the ground floor, in addition to rooms used as dining room, kitchen and pantries, there was Napoleon's bathroom, as shown in the accompanying picture. The bath tub was of stone, having above it a basrelief of "Truth," looking into a hand glass and bearing the inscription, "*Qui odit veritatem, odit lucem.*" (Who hates truth hates the light.)

The floor was mosaic of simple pattern and the walls were ornamented with frescoes of the period, representing spring time subjects.

The floor above contained what was known as the room of the pyramids. The

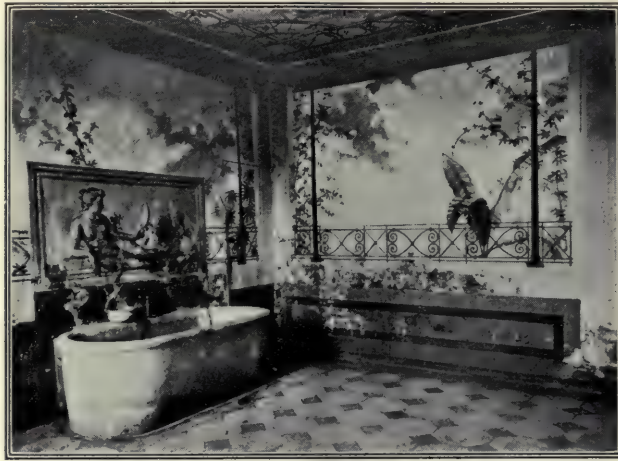


NAPOLÉON'S BEDROOM.

walls of this were covered with Egyptian subjects and paintings recalling incidents of the Egyptian expedition. There were figured columns on one of which was inscribed "*Ubicumque felix Napoleon*" (Napoleon is everywhere happy).

Next to this room was the salon, a fairly large apartment. There was some alterations in the fittings of this room since Napoleon's residence, but the general treatment remained typical of the late Em-

ed into squares on which were alternate bees and crosses of the Legion of Honor. The walls of this room also were draped with brocade. The furniture, which was said to be authentic, consisted merely of a mahogany bed with very little ornamentation, a rocking chair, which is very interesting in itself, inasmuch as it has been held by many persons that this article of furniture was distinctively American; two mahogany chairs upholstered in



NAPOLEON'S BATHROOM AT SAN MARTINO.—NOTE THE OLD FRESCOS.

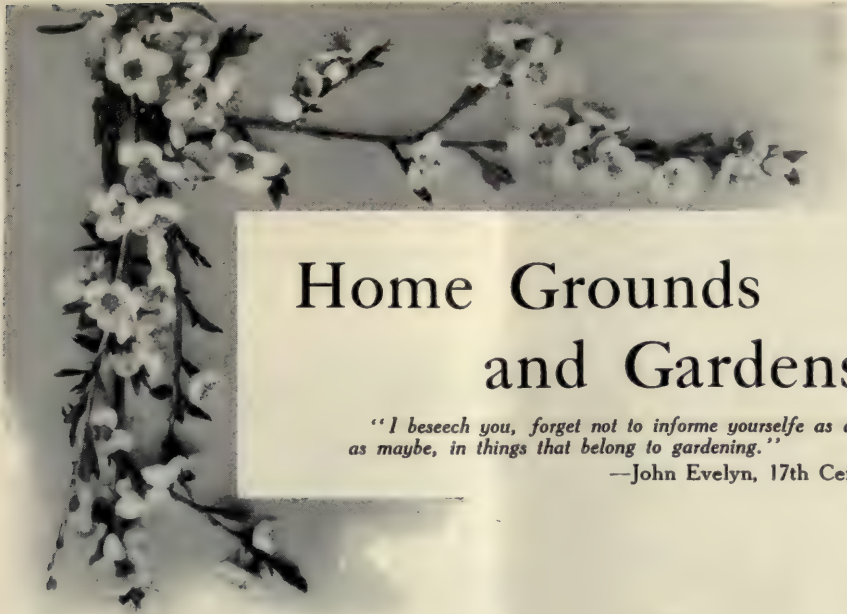
pire. The walls were hung with brocade depending from spear-points ornamented with the Empire wreath. The fireplace and mantel were good examples of the period. The ceiling of this room was draped in the center, the border being decorated with medallions, on one of which, the large one shown over the fireplace, were painted two doves entwined with a ribbon, typifying Napoleon and Marie Louise.

On the right of the salon, and occupying a corner of the house, was Napoleon's own room. The ceiling of this was divid-

ed into squares on which were alternate bees and crosses of the Legion of Honor. The walls of this room also were draped with brocade. The furniture, which was said to be authentic, consisted merely of a mahogany bed with very little ornamentation, a rocking chair, which is very interesting in itself, inasmuch as it has been held by many persons that this article of furniture was distinctively American; two mahogany chairs upholstered in

green velvet, and a writing table with simple brass ornaments. There was also a somnoe with a set of porcelain beside the bed and the writing table mounted a telescope which commanded the approach to the villa and through which Napoleon was wont to examine closely all visitors. In the opposite angle from Napoleon's room was the apartment used by his mother. The most interesting object in this room was an enormous four-poster bed with heavy green curtains and mounting two gilded pelicans at the top of each post.

NOTE:—We are indebted to the "Wall Paper News" for the illustrations and much of the information used in this article.



Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

—John Evelyn, 17th Century.

Planting of the Grounds

By Harry Franklin Baker
Landscape Architect

NOW with our plan before us, prepared as suggested in the last number, we are ready to determine what parts of the ground it will be advisable to plant and the kinds of plants best adapted to give the effects desired. It is generally best to begin with the ground immediately surrounding the house.

This suggests trees and vines if there are none already planted. When locating the trees, keep in mind the size to which they will grow. Do not set them too near the house or in such a position that they will cut off any desirable view as they grow to maturity. Remember that a tree is to remain where it is planted for many years and if it is expected to grow to its full beauty and size, it must be supplied with an abundance of good rich soil to a depth of several feet. Very likely it will be desirable to locate some of the trees

where they will provide shade for the house or some part of the garden—others to provide a setting or frame for the house. This is generally best accomplished by keeping them a little to each side of the house. Do not plant them in the center of the lawn. If the lot is small, it is better to keep them near the boundaries of the property.

Trees for this purpose should be selected for their character of growth, their foliage and longevity such as oaks, elms, lindens and hard maples. Do not select trees because of their peculiar form and showy blossoms but more for their grace and stateliness and the quiet refinement of their foliage.

Next, a background must be provided, as no house appears at its best when outlined against the sky alone or some neighboring barns or other buildings. From this it is evident that very often a part of

the background at least is to serve also as a screen. Some of the trees used for this purpose may very properly consist of kinds that make a rapid growth, although they are not so long lived. Such trees will give a quick result and may be removed after a few years as the trees of slower growth attain the required size. In this method the trees should be set quite close together and after they be-

grow well up on either side of the window. The vine at the right hand corner is an *ampelopsis Engelmanni*. This vine is very hardy even in Canada and will cling to most kinds of brick and stone without support. Eventually it will reach to the cornice of the house. In the autumn it turns a beautiful crimson. Very often it is used to climb to the top of an outside chimney.



PLANTINGS OF SPIREA AND BARBERRIES, WITH LILACS.

come too crowded the less desirable ones may be removed.

Conifers make a fine screen the entire year through and also, by their color, add interest and cheer to the winter landscape. The poplars and catalpas are rapid-growing trees, also the silver maple.

The main purpose for planting about the house is to tie the building to the grounds and to make the transition from the lawn to the perpendicular walls of the building less abrupt.

The planting in front of the house here shown, consists largely of spiraeas and barberries. Between the windows are lilacs which are just beginning to show their height. In time, these lilacs will

In places where it is not desired to have a vine very high, the *ampelopsis Veitchi* will do very nicely. Although not very hardy in the northern states, the roots seldom die out, and as the new growth is very attractive, it is well worth using.

In the above picture, this vine will be seen growing on the wall near the steps. In looking at this picture, can you not realize how much more attractive the house will be when provided with a background of foliage? Trees for this purpose have already been set at the rear of the property, but have not yet had time to make the necessary growth.

Another excellent vine is the *clematis paniculata*, which is shown by the win-

dow at the left. In the following picture, the same variety of vine is shown in full blossom. Notice the manner of support furnished this vine. The clematis must be supported. In the north, it generally dies to the ground with cold weather, but after once established, it will make even a stronger growth than shown here. Another most desirable class of vines are the lonicera or honeysuckle. The foliage is especially good and several varieties have fragrant blossoms.

Of hardly less importance than the vines mentioned above are the celastrus or bitter-sweet and wild grape vine. These are very useful for covering pergolas or trellises. The aristolochia is a useful vine in locations somewhat shady. It requires a support and a year or two to become established. The foliage is rather coarse and large. When in blossom, the climbing roses are most charming, but without the blossoms, the effect of the foliage is not nearly so good. They are not always successful on a south brick wall, as the heat is apt to burn the foliage. Where hardy, the trumpet vines and wistarias are extremely beautiful. For a quick effect, the cobeia scandens, an annual vine, will be found very satisfactory. It has good foliage, attractive blossoms and makes a remarkably rapid growth. The large flowered clematis gives very



Clematis Paniculata.

beautiful effects when in blossom, but as a vine, the foliage is not especially good.

There are many other desirable vines in addition to the ones mentioned here, but the above are some of the best and most reliable.

In our next number we will consider the use of flowers and shrubs about the home.

Time to Prune Shrubs

What is the proper time to prune rambler roses, wistaria, hydrangeas and lilac bushes? How are they pruned, or what is the distance to cut them from the main stem?—A. G. H., New Jersey.

In pruning rambler roses cut off in the spring, before the buds open, from one-fifth to one-third of the previous year's growth; also, in established plants, any of the old, flowering wood which is en-

feebled. Do not hesitate, even if a part of the trellis is laid bare. It is only by this method that these plants can be kept vigorous. In summer take out most of the old wood after it has finished flowering and train new growths as desired, pinching out weak and objectionable shoots. Hydrangea paniculata and hortensis, and also most of the other species, should be pruned in the fall or spring.

How One Home-Builder Did It

The Building Experience of F. B. Miller

[N. B.—We would be glad to hear from others.—Ed.]



FINISHED my house, the photograph of which I sent you, in a rough pebbledash cement, the color being a gray with a greenish cast to it. I got this color by using a light gray cement mixed with crushed limestone rock, screened to size, common river sand, and pure white sand.

and the ceiling beamed. The woodwork is finished in a brown weathered stain, the ceiling tinted in buff and the side walls in a rich brown.

The music room is finished in a weathered oak, a shade darker than the hall. The side walls are papered with a dark blue cartridge paper, each wall being out-



FRONT PORCH, SHOWING BROAD AND SPACIOUS CEMENT PORCH.

The different proportions of these materials were mixed together until the desired shade was procured. My plasterer mixed up several batches and the same were dried in a gas oven. The trimming of the house is a rich olive green, and harmonizes with the cement in a very pleasing way.

On the inside of the house, the hall, living room, music room, and dining room are finished in quartered oak, the hall being wainscoted on the sides five feet high,

lined in a panel of conventional design, the colors being of blue and old rose. These colors are very dull in tint. The furniture in the room is mahogany upholstered in blue monk's cloth.

The woodwork in the living room is given an Old English brown finish. The side walls are papered with a plain brown cartridge paper with a twenty-four inch landscape frieze. This landscape frieze is in tones of brown and harmonizes with the rest of the room very nicely.

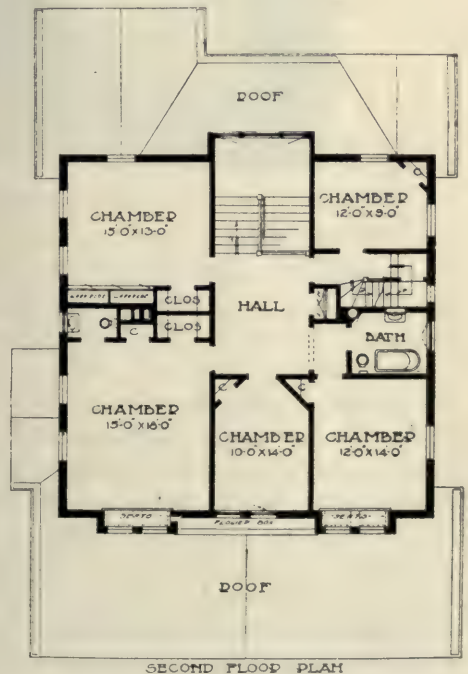
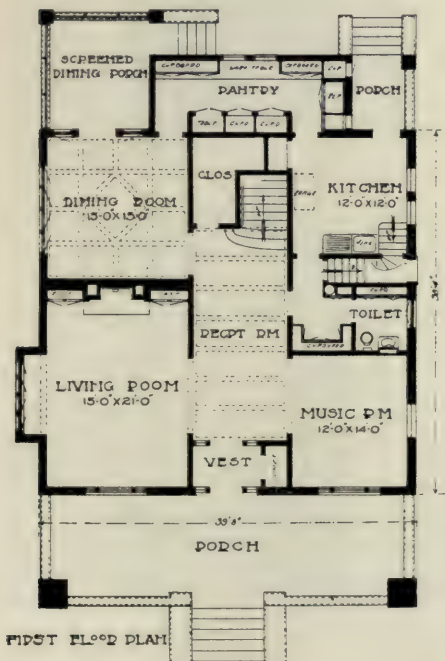


SIDE AND REAR VIEW OF HOUSE SHOWING TERRACES.

The dining room woodwork is finished in Old English stain, being wainscoted and the ceiling beamed. It is lighted by side lights and a rich stained-glass dome in the center. All the metal work of the light fixtures is in verde antique. The fixtures in the hall are also in this finish. The side walls are finished in leather in a dull gold effect.

The woodwork in the second floor bedrooms and bathrooms is finished in white enamel. The first story floors are quartered oak and the second story floors are white maple.

We consider our floor plan a gem; we wanted abundant light in the living room and we got it. The longer we live in the house the more satisfactory it proves.



Timely Talk on Curtains

By Eleanor Allison Cummins



NO question comes to the decorator more frequently and more earnestly than, "How shall I curtain my new house?"

As to Materials

In the first place, although the shops are still full of them, it is pleasant to chronicle the passing of the lace cur-

tain which one may happen to have is as a bed spread, using the pattern of the sides and bottom as a border to a center of heavy net, covering the joining with a line of lace braid of a harmonizing sort, and laying the whole over a lining of yellow or rose satine. A study of the curtains and bed spreads of filet, cluny and



DOTTED NET AND SIDE DRAPERIES OF JAPANESE CREPE.

tain. It survives in many houses, but it is no longer bought by people of taste, except for use in a formal reception room furnished in French style, to which it seems rather necessary. The single Bonne Femme curtain of heavy net, more or less elaborately ornamented with braid or other applied ornament, is desirable in the city house whose windows are close to the street, although a width of heavily patterned net, like the filets which copy the old Italian peasant work, is preferable. Perhaps the best use to make of a pair of handsome lace curtains,

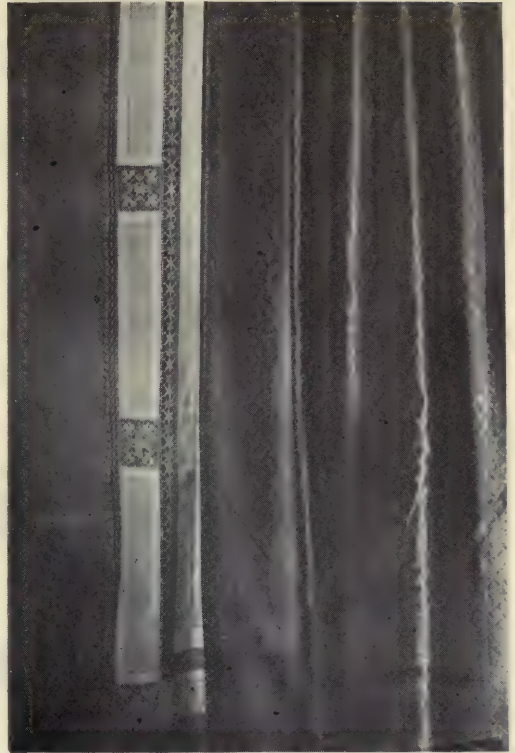
embroidered batiste, which are shown in smart shops, will give one a very good idea of what may be done in the way of putting together different sorts of lace. With some sorts of curtains a fine batiste center, either cream or white, is better than net. These shops also show separate curtains of very fine, sheer batiste or voile with dainty borders and insets of lace, which meet the tastes of those who prefer a regularly made curtain to materials by the yard. These vary in price from \$7.00 or \$8.00 to \$20.00 the pair.

The Use of the Filet Net

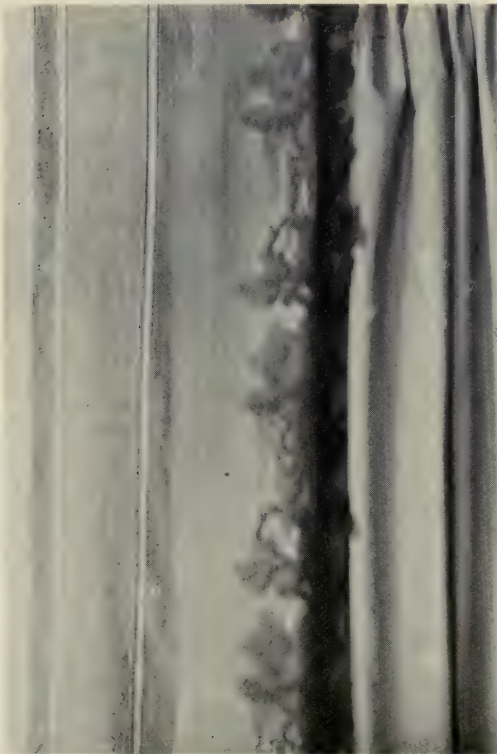
Filet net in squares, with quaint heraldic designs, is a very good material to use in a room where both windows and doors must be curtained. It is not especially cheap, costing seventy-five cents a yard, forty-five inches wide, but it is durable and very effective. As it is rather heavy, curtains need not be as full as those of thinner materials. For a door it can be stretched on plainly, its edges covered with a cotton gimp. It is so decorative in itself that a second set of curtains seems superfluous. When they are used it is well to choose a plain material, like rep or poplin, or some of the sun-fast materials for the second set of curtains, as two patterns are apt to kill each other.

The Use of Cretonnes

A charming use for one of these effective cretonnes with a design of brilliant



Curtain of Fine Batiste, with Insert of Filet Lace; Side Draperies of Golden Brown Figured Sun-Fast.



Curtain of Bordered Batiste, 85 Cents the Yard; Side Drapery of Natural Linen, with Border of Lilacs in Green and Purple.

colors on the black background is as a cover for a single piece of furniture in a room, either a couch or a large chair. Most of these cretonnes have a good deal of pink in them, and they fit in admirably, when the general scheme of the room is old rose in some of its shades. The same cretonne is then used for curtains, thus giving the needed touch of black, which does so much for the colorless or negative room.

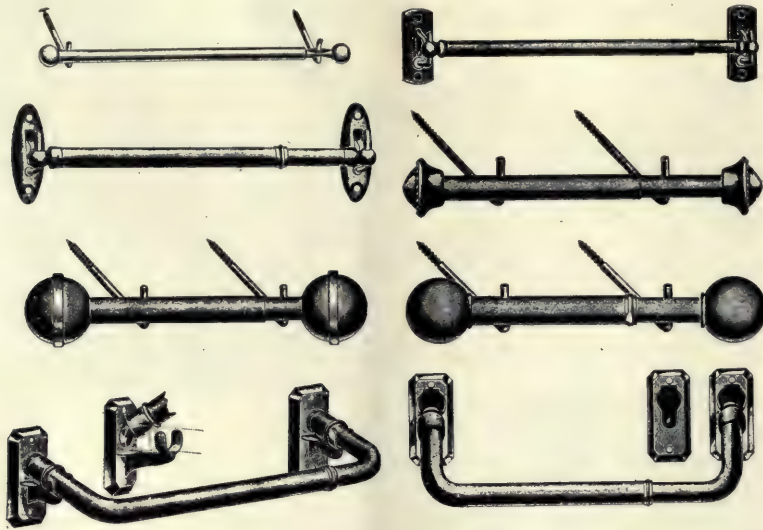
In the house of a well known decorator this material is used for curtains with a rose and green rug and furniture with gilt frames, and coverings of green and white brocade. The vogue of these black cretonnes is another example of the education of the public taste to a gradual appreciation of a novelty.

Another bedroom has a fourposted bedstead with hangings of white dimity repeated at the windows and dressing

table, with a wall paper of great bunches of pale tinted roses tied with green ribbons. Another old fashioned room has a striped paper in pale grey, with a nose-gay-and-blue ribbon border outlining each of the four walls inside a two-inch band of plain grey and white madras curtains.

After the materials are decided upon, an intricate and puzzling problem to many is

at the sill, just touching it, and be hung inside the frame of the window on a brass rod run in the upper hem. If there is only one set of curtains, this rod should run in a welt, leaving a narrow ruffle above it, and the sockets for the rod should be set so that the edge of the ruffle just touches the window frame at the top. Right here appears the advantage of making your curtains yourself. When you buy a ready-made curtain you



SHOWING RODS AND BRACKETS USED IN HANGING CURTAINS.

The Hanging of Curtains

The great variety of windows to be found in modern houses taxes the skill of the woman who would save her money and make and hang her own curtains. Shall curtains stop at the sill, or be carried to the floor? Shall shades match the exterior or interior of the house? Shall I have two sets of thin curtains? How shall I hang the curtains of a set of four casement windows side by side? What shall I do with French doors, and how curtain inward opening casement windows? Such are some of the questions which people ask.

The length of the curtain depends upon the style of the window, but the general rule is that the thin curtain shall stop

pay for a good many inches of extra material on each curtain, unless your windows happen to be of absolutely standard length.

Curtaining the Casement Window

This is simple enough if the windows open out. You treat them just like any other windows. If they open in, you must fit your curtains to the frame of each division. If only the lower half of the windows are movable, you will have to hang your curtains in two sections, and when the windows are open, the effect will not be exactly happy. I think that in such cases it is best to dispense with thin curtains altogether, and to hang side curtains, and a balance of some thick material outside the frame

of the window, depending on awnings to shut out the summer's sun.

These side curtains and valance are a great improvement to any casement window, especially to those in groups of three or four. The side curtains should be at the ends only of a group, the valance going across the entire window in a single piece, and if the window is recessed, both should be hung inside the frame on a separate set of rods, unless the proportions of the window, as is often the case, are helped by having them hung on the frame.

The Treatment of French Doors

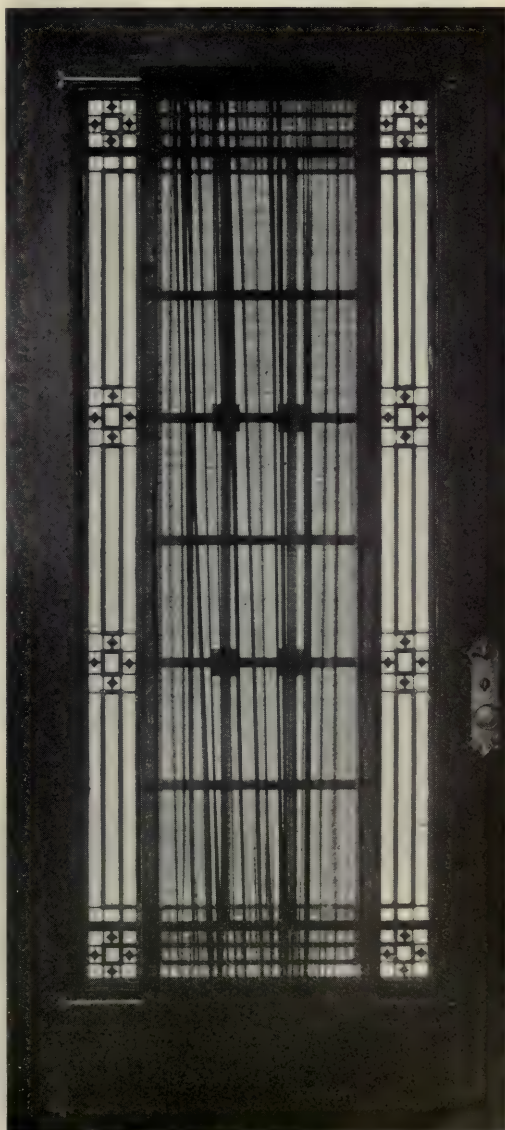
A French door in most cases requires the same treatment as the windows of the room, as it is practically a window itself, when it opens out of doors. That is, the same material should be used. But it is usual to have the curtains of a door shirred top and bottom on rods. Side curtains and a valance may be used with a door, but are not at all necessary. If they are used they must be attached to the outside of the door frame, and the curtains of the windows must be hung in the same way.

When French doors are leaded in copper with design in some of the refined and beautiful work now in use, either partial screening or none at all is necessary. The illustration shows a fine treatment of such a door in the hall of a handsome house. The material used is a sun fast grenadine in an olive tone, and is drawn into the center of each door so as to show the beautiful decoration and give more light.

For a room combining copper color and green one of the leaded windows made from the bottoms of green glass bottles is immensely effective. The obvious thing with such a window is the casement opening and curtains are rather out of place, although if the exposure is a sunny one a sill length hanging of plain raw silk is not objectionable.

But too much emphasis cannot be laid on the fact that with a rather dark, although bright, color scheme the conventional white thin curtain is out of place. There are exceptions to this rule, where it is essential to privacy, but a bottle-green leaded window does not offer such an exception.

Beautiful materials when hung in a room where they are placed next a window so that they hang in a deep shadow,



Treatment of French Door in a Hall.



Charming Hanging of Pink and Grey Chintz in Bedroom.

lose all their quality. Likewise, colors in thin materials which are examined with the light shining upon them are quite different when hung as curtains with the light shining through them.

The Curtains for a Bay Window

A great many people are puzzled to know just how to curtain a bay window, especially the rather old-fashioned sort,

almost circular and with five openings. The old way was to fit the separate windows with shades and have long curtains tied back at either side at the opening into the body of the room, and the tradition persists. The better way is to treat the bay window as an integral part of the room, its windows just as you would ordinary single windows.

If the windows are high enough to admit of it, some sort of a valance adds greatly to the effect of thin curtains next the pane. The writer has lately seen a window of this sort with plain white scrim curtains tied back a little above the sill of the window and stopping at it, straight side curtains over them well pushed back, and a gathered valance carried across the top of all five windows. The room was a dining room with warm tan colored walls, brown woodwork and furniture and much blue china, while the over curtains were blue and white Japanese cotton crepe. The monotony of the paneling under so many windows was relieved by a low green wicker table, standing a little to one side of the bay, and holding an enormous fern.

If the bay window is a shallow one it looks well with deep cushioned seat carried around the curve, and the spaces below the seats can be utilized for book shelves. These cushions should be covered to match the side curtains, in color if not in material.



Short Draperies at the High Windows.

"Elm Shelter," An Architect's Country Home

By Chas. S. Sedgwick



OME! Webster's terse definition of home is "one's dwelling place" and strictly speaking that is correct. There are as many different kinds of homes as there are different kinds of people; as a general rule the

has surrounded it with much that is very beautiful to a lover of nature.

Only a small piece of ground with frontage 140 feet, rough and uneven in the lay of it, but many trees in their own natural setting, and, best of all, one grand



AN ARCHITECT'S COUNTRY HOME.

home reflects the people who occupy it. Show us the home and we immediately form an opinion of those who live within, but it does not follow that the grand and palatial residence, beautiful to look upon, is the reflection of grand and good characters within, and it is often quite the reverse. The small "tiny" home, the subject of this article, is located at Birch Bluff, Lake Minnetonka; it has very little from an architectural standpoint, but nature

old elm, over three feet in diameter and towering over one hundred feet in height, standing a few feet away on the west side and overhanging the cottage and suggesting the appropriate name of "Elm Shelter."

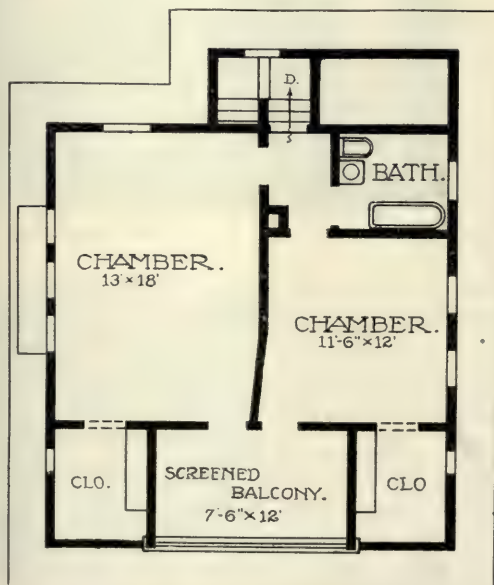
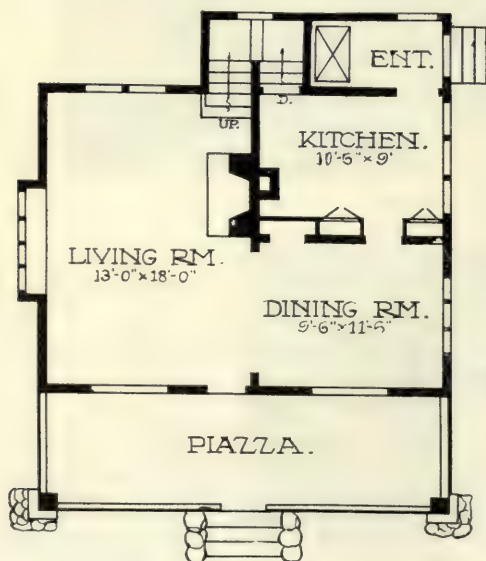
The idea of the owner was to get the very most out of a little—a small expenditure of money and large realization of comfort and great restfulness. The cottage has a low spreading roof



"ELM SHELTER"—*Mulum in Paroo.*

with red stained shingles, and casings and cornices painted white, with rough grey cement dash on the outside walls that is equally good to keep out heat and cold and just the surface for the beautiful woodbine that grows luxuriantly and in two years' time has nearly covered one end of the cottage. The piazza across the front and the sleeping porch over are well protected from storm by the

wide projected eaves and make one of the most attractive features of the home. The living-room and dining-room open onto the piazza with French windows, and the open brick fireplace with a cheerful wood fire adds greatly to the home comfort on cold days and evenings. With two bedrooms on the second floor and sleeping-porch, six adults have often been comfortably housed over night.



The small dining-room, convenient cupboards and kitchen arrangement make the housework comparatively easy. A good hot-air furnace furnishes plenty of warm air and ventilation. The owner is a firm believer in having the home grounds inclosed, and to accomplish this a fine red dogwood hedge has been grown across the entire front, and being properly set out and cared for has grown finely and is now three feet in width and trimmed three feet high, with two gate openings and winding gravel walks, adding greatly to the retirement and privacy of the place. There are bunches of elm trees, ironwood and basswood affording ample shade and background to the "tiny" cottage nestled among them. A

good tennis-court and lawn for croquet offer attractions to all that enjoy outdoor sports; a garden across the rear offers ample opportunity for gratifying one's ambition for supplying the table in season with things good to eat and fresh. Several places allotted for flowers and well filled complete an ideal and unpretentious home where, after busy hours of office work and perplexing study, one can enjoy an evening of rest and smoke.

The outlook from the front is on the main upper lake (Minnetonka) road and appropriately named "Paradise Avenue," and looking across and down a wide gravel path, at an elevation of twenty feet, opens a broad and expansive view of beautiful Minnetonka.

Rustic Adornment for Private Grounds

By Monroe Woolly



NOTHING perhaps is so full of solid comfort and enjoyment as the summer house in the gardens of the well-to-do. In them many a sultry afternoon and evening may be pleasantly spent, lounging in rustic chairs or reclining in hammocks swung from the supports. And summer houses should not be confined solely to the well-to-do, for their cost, if ingenuity is used, need not be prohibitive. Of course in summer houses one can spend as much as bank accounts will stand, even into the hundreds or thousands. On the other hand, there is something still better than the happy medium for ordinary folk. Material for a man's-size summer house may be had in most communities for ten dollars. The design should be rustic, in which case a small boy is equal to the task of going into the woods and bringing out the raw material. If the builder fells and trans-



A Bridge for Your Own Mississippi.

ports his own timber, the house will be that much cheaper. In such event, there should be no cost for material at all, except possibly a stumpage charge.

In building a summer house there is another advantage accruing to the person of small means. It is in the labor. The rougher the work in rustic construction the more artistic the effect. Such work is truly the field of the hatchet-and-saw man. Therefore, if you can use these common implements the cost of your

effect, and for that reason are not appropriate. In working in the fancy work small pieces of timber, not more than from one to two inches in diameter, should be used. These should be green, unseasoned branches taken from the timber used for supports, so that they will bend readily without breaking or splitting. All sorts of twigs, even those one-quarter of an inch in diameter, may be used in elaborating novel decorative effects.



A SUMMER HOUSE FOR LESS THAN TEN DOLLARS, IF YOU ARE A HATCHET-AND-SAW MAN.

summer house should foot up surprisingly low. Another advantage in this sort of construction is the extremely small amount of real work involved. Summer houses are skeleton houses only. That is, they have no walls and no floor. Briefly, the specifications call for main supports, some fancy wicker-work interlaced, and a roof. Even the roof need not be of expensive material or waterproof. Summer houses are not for wet weather. Certain kinds of bark, in fact, most any bark capable of being flattened out, will suffice for a roof. Milled boards spoil the rustic

From a dozen small trees, say those having trunks of from six to seven inches, a large summer house may be built. As the trunk and branches are used, nothing goes to waste. From six trees of the kind, which may easily be hauled in an express wagon, a summer house large enough for a small family may be made. The boy or young man that is handy with tools should find profitable occupation during his spare time, or during vacation, in building summer houses for those who have not the time or the inclination to build their own.

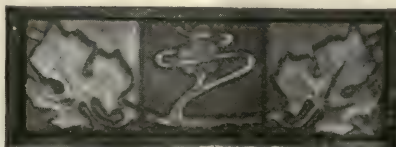


MUSIC PAVILION OF THE UNIVERSITY OF WASHINGTON, SEATTLE.

Homes that have small streams running through the lawns may be made very attractive by building small rustic bridges across the little streams, the smaller the more attractive. Where running water is wanted for the poultry yard in the rear of the home a little project in canal-digging greatly adds to the beauty of the front gardens. A ditch a foot wide, or even less, and six inches deep, winding gracefully about the flower beds to keep them moist, and emptying into a basin in the poultry yard for the ducks will quickly suggest to the artistic mind the places where rustic bridges, however tiny, are advantageous to the general beauty of the grounds.

The Music Pavilion

All the larger schools and colleges of the country are going in for music pavilions. Music is claiming many lovers throughout the realm of rag-time, and it may not be long before we begin turning out masters that will make the old professors and composers of Europe rather envious. The University of Washington has devoted a large appropriation to the construction of a technically perfect pavilion for musical events. The building is located on a charming spot. A large forest stands at the rear, so that the birds and the squirrels probably think bedlam has broken loose when the conductor of the symphony raises his baton to lash the air.



Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 425 ROBT. W. MAUST, East Orange, N. J.

B 426 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 427 R. C. POWELL, Dayton, Ohio

B 431 A. M. WORTHINGTON, Albany, N. Y.

Design No.

B 428 A. C. CLAUSEN, Minneapolis, Minn.

B 429 BUNGALOWCRAFT CO., Los Angeles, Cal.

B 430 KEITH'S ARCHITECTURAL SERVICE, Minneapolis

Design B 425.



HIS design, which received honorable mention in the brickbuilders' competition last year, has a number of interesting features.

Though a moderate cost house, the plan shows quite an imposing entrance hall with a vestibule arrangement which affords a coat closet in the hall, and a convenient closet in the living room. The hall is lighted by a hanging oriel window on the stair landing which makes a pretty feature of the exterior, with its diamond lattice panes. The entrance steps with their iron railing and sheltering hood, the excellent grouping of the windows with their green shutters, together with the disposition of the flower boxes and the arches of the porch, quite sufficiently relieve the plainness of the square outline. The construction is of Natco Hollow Tile, coated with cement, rough cast, and a shingle roof. At small additional cost roofing of slate or asbestos shingles could be substituted, and greatly add to the value and appearance. The house is planned to cost \$6,000, and this estimate includes a full basement with hot water heat and the usual plumbing. The inside trim is hardwood on first floor, with hardwood floors throughout. Height of first story, 9 ft.. Second story, 8 ft.

Design B 426.

This convenient seven-room bungalow is 38 ft. in width and 48 ft. in depth, exclusive of the piazzas, two in number, one on the main front, and one on the right

hand side, both opening from the house with wide French windows. These piazzas are wide, and built with cement floors and boulder stone walls; the corner piers of the front are also built of boulder stone. The outside of the bungalow is shingled with cedar shingles, stained brown, and all of the trim, cornice, casings, etc., may be stained brown.

There are seven rooms on the main floor, with a central hall and vestibule entrance. At the right from the vestibule on the main corner is the living room, 13'x19', and opening from this with columned arch is the dining room. The kitchen is at the rear of the dining room, large in size, and has convenient pantry cupboards, and a rear stair leading to the basement and to the attic story. At the rear of the kitchen is a liberal-sized shed and a porch. Bath room opens out of the rear hall, a small sewing room and a bed room or den; main bed room in front is 14'x14'. In this plan it is designed to finish three rooms on the second floor, full 8 ft. in height, the first story rooms being 8' 6" in height.

The finish of the first floor throughout is in mission oak, with oak floors. The second story rooms are finished in fir and stained, with fir floors. The cost is estimated at \$3,500, exclusive of heating and plumbing.

Design B 427.

This design gives liberal space and all the comforts for a small amount of money. It dispenses with all frills, and aims to



Robt. W. Maust, Architect.

Courtesy of the National Fireproofing Co.

DESIGN B 425

Attractive Design in Rough Cast

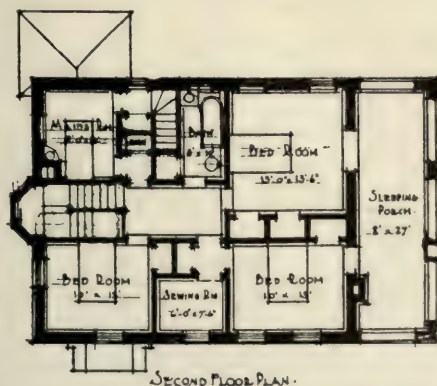
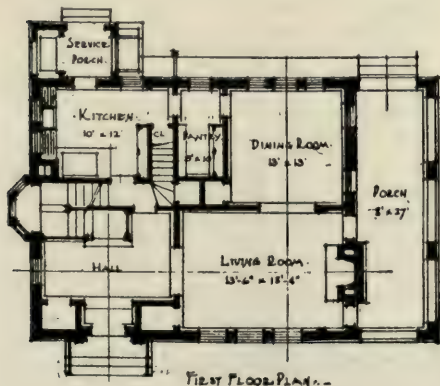
secure the most actual value for the least expenditure. There are two full stories and a well lighted attic; the first story being 9' 2" in height, the second 8 ft. The construction is frame, sawn siding being used on the first story and shingles above, with shingle roof and brick foundation and chimneys. Deeply projecting eaves and a generous porch relieve the plainness of the exterior.

This house was built for about \$4,000, and this estimate includes full basement, with laundry and hot water heat and plumbing. The finish of first floor to be

hardwood, with hardwood floors throughout.

Design B 428.

An ambitious dwelling with marked colonial feeling shown in the exterior treatment. A broad terraced porch receives a roof shelter on the left side, with stately two-story pillars over the front entrance, capped by an architrave and projecting cornice which supports a balcony, to which access is gained from the roof dormers which light the attic. A small balcony within the portico opens from French doors in the second story front.



There is also a balcony above the side porch, extending its entire length, so there would be no lack of breathing space for the occupants of this house. The construction is solid brick walls, with wood trim and shingle roof, but slate or asbestos shingles could be substituted with advantage, and be well worth the additional cost, both in appearance and durability. The floor plan shows a very complete arrangement, with servants' rooms in the attic. Only one bath room is shown, but one of the small rooms could be utilized for another. The height of the first story room is 9' 6". Second story, 8' 6".

Design B 429.

This very handsome bungalow is at present under construction in four states at costs which run from \$2,200 in Southern California, to \$3,000 in Michigan, with cellar and hot water heating.

The house can be built on a 50-foot lot, either as shown in this illustration, or reversed, and a very taking feature is the side porch, which opens into the dining room and also into the breakfast room by French windows, or, in a cold climate, by doors.

The exterior is built on pure bungalow lines, with brick porch and chimneys, and the outside walls are shingled. The roof has sufficient pitch to take either shingles or prepared roofing, and although it appears flat, it is in its construction so well braced from bearing partitions that no amount of snow will cause the slightest sag.

The floor plan is so distinct that no explanation is necessary. The rooms are all of convenient size, and the lighting and ventilation are perfect. The plan shows two concealed beds, which may be used or not, according to requirements.

Design B 430.

This design in cement plaster construction presents a simple but dignified exterior, with excellent floor plan, at minimum cost. With outside dimensions only

24'x40' over all. The floor plan shows a spacious center hall, with very large living room and fireplace to the left, library and kitchen on the right, and a unique placement of the dining room back of the hall, with one wall given up entirely to a group of windows, this house having been planned with special reference to a delightful view from these windows.

Above the living room a sleeping room is arranged, opening from a small sitting room or chamber. The bath is located in front,* with a large, airy chamber to the right.

The cost estimate is \$4,500, which includes full basement, with hot water heat, plumbing and hardwood finish on first story, with hardwood floors throughout. Height of first story, 9' 2". Second story, 8 ft.

Design B 431.

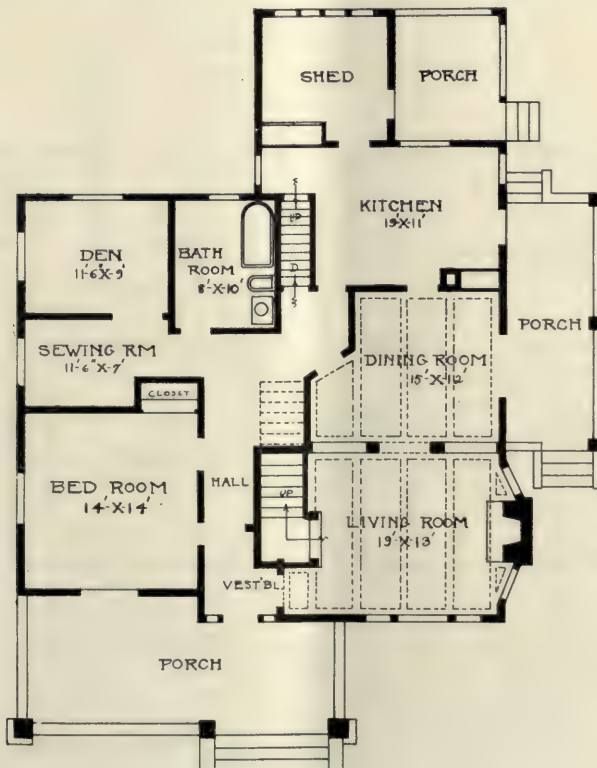
The exterior of this design is cement plaster, relieved by timber paneling in the roof gables and porch. The main entrance is directly on grade from a small tile-paved terrace. A foundation of rubble stone below the cement extends around the house. The left hand corner is cut off, and a bay window extended from the already generous living room, which also opens into an enclosed porch, which is used as a sun parlor. A recessed inglenook in the rear makes the living room occupy the entire depth of the house. The stairs are recessed at the rear of the front hall, and its large vestibule with a convenient arrangement of the service part of the house, and the dining room located in front. Both living and dining room have beamed ceilings. These generous living rooms are provided in a ground space of 30'x33', exclusive of porch. There are good rooms on the third floor, which is well lighted. Hot water heat is included in the cost estimate of \$7,000, with hardwood finish on first floor, birch or pine on second. Height of first story 9' 2". Second story, 8 ft.



Chas. S. Sedgwick, Architect.

DESIGN B 426

A Seven Room Bungalow

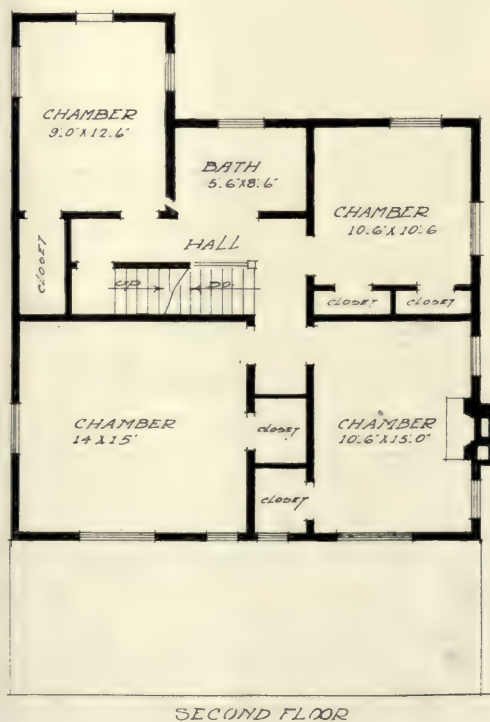
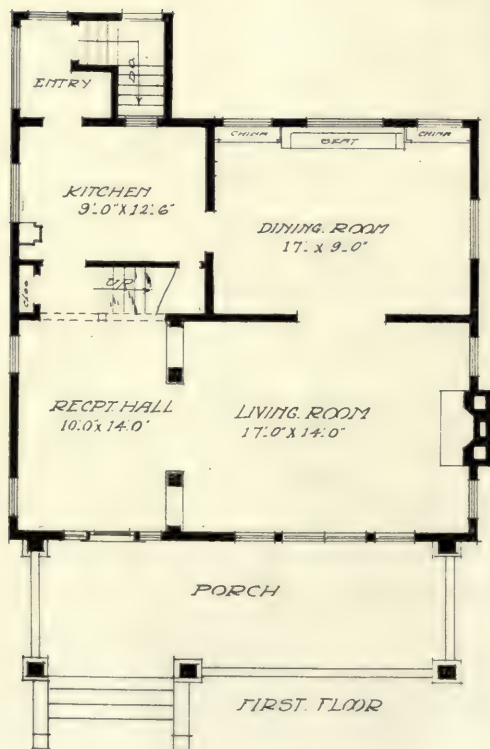




R. C. Powell, Architect.

DESIGN B 427

Plain, But Serviceable and Substantial

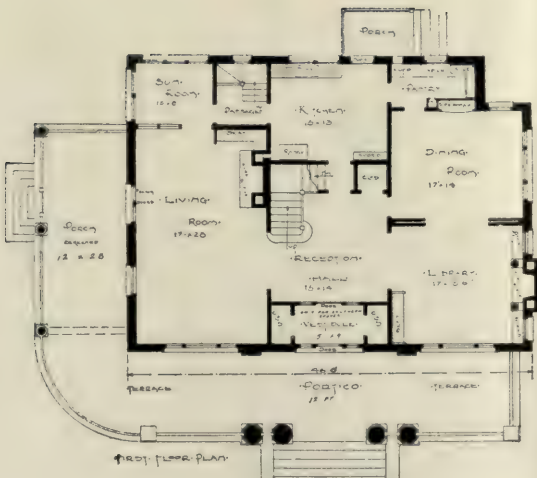




A. C. Clausen, Architect.

DESIGN B 428

A Brick House with Colonial Detail

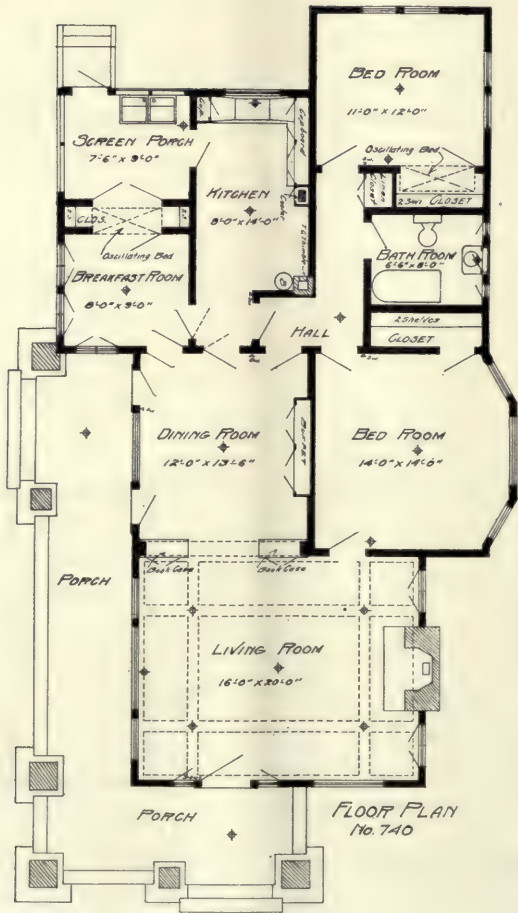




Bungalowcraft Co., Architects.

DESIGN B 429

On Pure Bungalow Lines

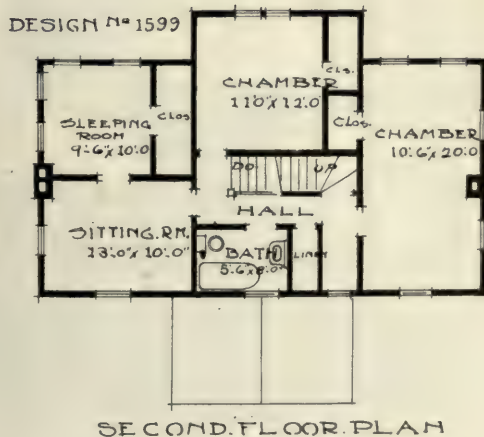
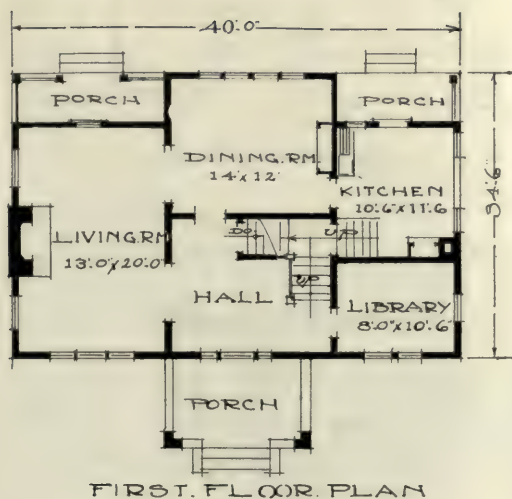




Keith's Architectural Service.

DESIGN B 430

A Simple But Dignified Exterior

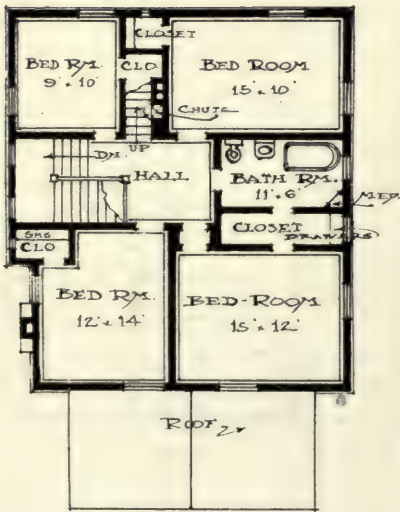




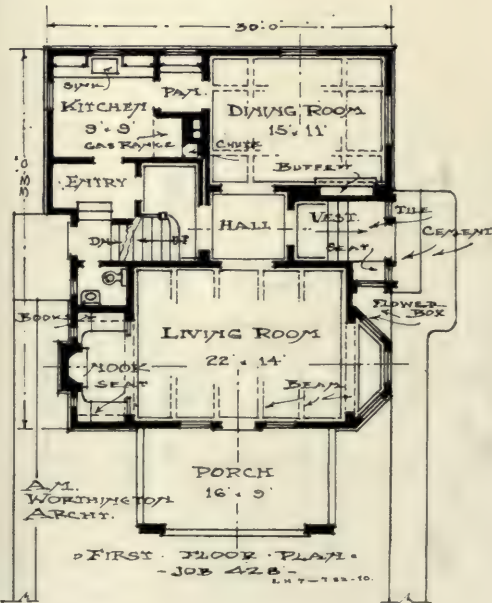
A. M. Worthington, Architect.

DESIGN B 431

Cement Plaster with Timber Paneling



SECOND FLOOR PLAN -
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The Problem of Golden Oak.

WE are still suffering for the craze for golden oak, which preceded the Mission period in our domestic furnishings. Not that golden oak is of necessity wholly bad. There are tones of it which are rather pleasing than otherwise and it is certainly far less obtrusive than birch with its vivid, almost orange tone. In England decorators use white oak in its natural tone and combine it with white walls and blue china, toning the composition up with the strong reds and blues of an Oriental rug. The difficulty is that golden oak does not combine well with other woods. If most of your furniture is mahogany, you strike a jarring note the minute you introduce, let us say, sectional bookcases in golden oak, while walnut or rosewood would be perfectly inoffensive. If the oak pieces happen to be of that variety which is known as figured oak, the color of molasses taffy and of abnormally high polish, the condition approaches tragedy.

The Counsel of Perfection.

The best thing to do is to change the color of your furniture entirely. In many cases the application of denatured alcohol will remove all traces of varnish. In others a varnish remover will be needed, but the work requires no skill but patience and thoroughness. Once down to the original wood the recoloring with a wood dye or stain is simple. Early English, nut brown, brown Flemish, fumed oak, weathered brown or green are all good tones. Nut brown is the best stain to use if the furniture is to associate with mahogany, unless one chooses silver gray, which is charming for some rooms.

After the pieces are stained they should be given a finish with prepared wax, and

rubbing to a polish is a matter of choice. Nothing is so responsive to friction as wood.

The Policy of Segregation.

If you have neither the courage nor the inclination to refinish your oak furniture, the best thing to do is to isolate it, and to decorate the room or rooms which it occupies in harmony with it. Do not, if you can possibly help it use it in a room with white woodwork. If you cannot have woodwork of the general tone of the furniture paint it to harmonize with the paper, or tint of the walls.

Once in a while you hit on a brown wall paper that looks well with oak furniture. It is what might be classed as a tobacco brown, with no hint of yellow. It needs sunshine and positive color to light it up, preferably blue and orange. And for a bedroom you may use an old blue wall very successfully with oak furniture and an upper third of paper with a good deal of pattern combining blues and golden browns and brownish pinks. I have also seen a shade of terra cotta that seemed to be just the thing to bring out the best points of oak furniture, but it was probably rather a fortunate accident than a carefully studied choice.

But for the average room with golden oak furniture the best choice is a wall of low toned green, not gray or yellow, olive. With painted woodwork of a darker olive and all the furnishings of the room in low tones of green and brown the objectionable tone of the wood sinks into insignificance. It is sometimes possible to find in imported tapestry papers carefully blemished tones of russet and brown and green which give a general effect of soft olive and these are even better than the self-toned paper, but finding such things is a happy chance.

The Proper Method of Finishing Woodwork

By Herbert F. Johnson



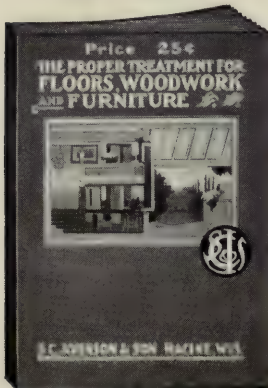
WELL finished woodwork is just as essential as the decision on the woods used.

The inexpensive woods such as pine, cypress, red-gum, birch, etc., are being used largely for interior woodwork, and if they are well finished, most satisfactory results can be had, as all of them have a very beautiful grain.

Where wood is to be finished in its natural color, let the first coat be Natural Paste Wood Filler No. 10. This will fill the pores and grain of the wood, giving a hard, even surface ready for the finish.

For an inexpensive natural finish for soft wood, apply a coat of Johnson's Under-Lac directly upon the wood, which will give a most excellent finish. Prepared Wax or Flat Wood Finish may be applied over the Under-Lac if desired.

For Golden Oak, Dark Oak, and Antwerp Oak effects, a colored Paste Wood Filler should be used. Then Wax, Under-Lac or Flat Wood Finish.



penetrates deeply, dries quickly and brings out the beauty of the grain without raising it in the slightest.

For filled grain colored effects on hardwood, such as Oak, Chestnut and other woods with an open grain a colored filler can be applied over the Dye. If any one will write me for further information on this subject, I will be

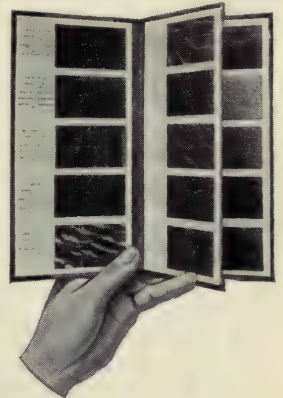
glad to give specific directions for getting the best effects.

For a finish over the dye or Paste Wood Filler, some people favor a high gloss finish, while others give preference to the dull finish, which is more beautiful and artistic. An ideal finish is Johnson's Prepared Wax. This should be applied with a cloth and brought to a polish with a dry cloth or a flat, stiff brush. After the first coat has hardened thoroughly a second coat should be applied and polished in the same manner.

This, however, requires considerable labor, which adds to the cost. Almost the same effect can be had by applying a coat of Johnson's Flat Wood Finish over the Dye or Filler. Flat Wood Finish should be applied with a brush. It dries absolutely flat in three or four hours and requires no hand rubbing or polishing.

On this page is an illustration of Johnson's \$1.00 portfolio of wood panels which shows on actual woods, the many beautiful effects obtainable with Johnson's Artistic Wood Finishes. This portfolio with a copy of our 1913 booklet edition K. E. 6, "The Proper Treatment for Floors, Woodwork and Furniture," will be mailed Free to parties interested in building, if they will write me, care S. C. Johnson & Son, Wood Finishing Authorities, Racine, Wisconsin.

—Adv.



New Things in Wicker.

This spring shows a tendency away from the long popular greens to browns and grays for willow furniture. Of course green will always be immensely popular with some people, and it is full of summery suggestion, especially in its olive tones. The best wicker furniture is absolutely simple in weave, the shapes more often square than curved, and the dimensions of chairs and settles very generous indeed. In fact, and this is a point to be considered always in buying chairs, the seats of many pieces are too deep to be comfortable for a short person.

Much of the willow furniture shown is intended for piazza use, and some pieces have been specially devised for use in narrow spaces, like the long, very narrow tables, with end pockets for papers, books or work. There are triangular tables, which fit into corners, and are sold in twos, to be fitted together to make a square table at need. Beside the always popular muffin stands, "curate's assistants" as the English call them, there are portable work tables supplied with a handle.

By no means cheap, but a most desirable possession, is the hooded chair, in which an old or delicate person is perfectly protected from sun and wind, while enjoying the out-of-doors. Such a chair is often very useful in the house for the unfortunate individual who is susceptible to draughts. Then there are willow beds for the sleeping porch, which can be had in single or double width, and some very good looking willow window and porch boxes, which have the advantage of being much lighter than the wooden ones.

Lamps and Lamp Shades.

Wicker lamps of various weights are fitted for either oil or electricity. They have deep wicker shades which protect the flame efficiently when the lamp is used on a piazza, and some of these shades have openings at regular intervals, to diffuse the light, which are filled in with glass.

A New York decorator has improvised a shade for wicker lamps from one of the wicker bird cages, now so popular, lining it with a soft yellow silk. The effect is extremely good, as well as unusual. Since

the importation of these wicker cages, it is possible to buy a bird cage which is not a blot on the landscape. They are adapted to all sorts of birds, with the exception of the parrot, and probably also of his tribe. Polly has been known to chew up his wicker cage, and evidently requires wires for his safety.

Chinese Birdcages.

Some of the antique Chinese birdcages, made of wood and intricately carved, are of great value and eagerly sought by collectors. Other Chinese cages are entirely of metal, with the pagoda shaped top and bands around the sides lacquered in brilliant colors and ornamented with human figures in relief and highly gilded. These are supposed to be appropriate to the popular French schemes of decoration, and are extremely quaint.

The Fad for Things Chinese.

The day of China seems to have come. All the fashionable New York decorators are importing Chinese textiles, silk or cotton, and clever modern copies of old Chinese furniture. Presently all the shops will blossom out with American imitations, in cheap materials and glaring colors. But if temptation in this line assails any of my readers, let them remember that a little Chinese goes a long way, and that a cheap copy of something rare and costly and exotic is bound to be hopeless. Many American families have Chinese porcelain and furniture, which have come down to them from ancestors who were captains in the "China trade." With the present vogue it is quite possible to supplement them by a judicious purchase now and then, and to accumulate enough interesting objects to fill a tiny room, or an alcove off a larger one, but it is in extremely poor taste to associate, let us say, mission furniture with lacquered screens and dragon china. If we must jumble, better jumble with belongings whose inspiration is French. I have seen a pink-roses-and-blue-ribbon cretonne that was admirable accented by a pair of powder blue vases. Chinese lampshades painted with figures and landscapes on thin silk are charming on a gilt lamp and a black and gold lacquered screen looks well in a dining room furnished in old mahogany.

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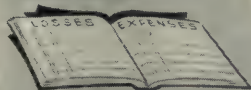
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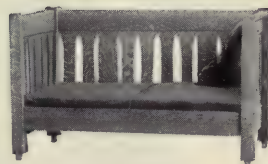
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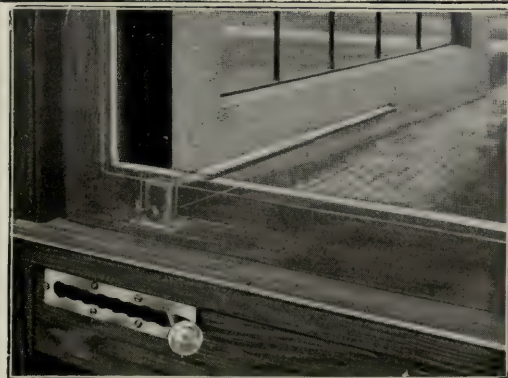


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And the printed Chinese cottons give a delightful touch to a mahogany bedroom. The reason is quite obvious, but no amount of imagination can place any of these Chinese things in the Missions of Southern California, nor in the Early English period which inspired William Morris.

A Wall Treatment for Living or Dining Room.

An interesting and very beautiful treatment for walls may be obtained by the use of a tapestry or foliage wall paper in which the background spaces are small and of approximately the same size. With a sharp stencil or penknife, the paper being placed upon a piece of glass for easy cutting, all the background spaces may be cut away and the paper then put upon a background of Japanese gold paper. This is not by any means an easy or an inexpensive piece of work. Comparatively speaking it is inexpensive, for the effect obtained is extremely rich and makes a very handsome room. The paper need not be very high priced, but the labor of cutting it out and hanging the tracery-like strips will be a fairly large item. The cutting may, of course, be done at home if one has a great deal of patience and time which is not more valuable spent in some other way. A strip of paper cut out at one time may not be too large an undertaking, and a few evenings spent in this way will accomplish without expense a piece of work which if done by a paperhanger would be a very considerable item.

Japanese gold paper comes in very large sheets, at ten cents a sheet. The wall should first be papered with these sheets and then the foliage paper hung over it. If there is a moulding or plate

rail in the room, the wall paper need be carried only to that, leaving the plain gold paper above it; or a frieze may be made in this way, choosing some plain paper or grass cloth of a harmonizing color to go below the molding. The body wall of the shining gold paper would be too obtrusive and garish.

When the process of papering the walls with first, the Japanese gold paper, and then the tapestry or foliage paper is accomplished, a coat of thin shellac may be applied to the entire wall space that is to be covered. It has the effect that a wash of thin color has on a water color drawing. It subdues the coloring and holds the papers together, and at the same time gives the wall treatment the effect of old leather.

The rose foliage paper is in tones of autumn colorings, soft tans, green or gray-rose tones shading into violet. This paper costs \$1.90 a roll and makes a beautiful living room. The tapestry paper of fruit and flowers is in tones of gray, green and old blue, and is excellent for a dining room.

Such a treatment of wall space is too striking and unusual to overdo, and one room papered in a house this way would be sufficient. Like many excellent things, it would lose its distinction if overdone.

A very beautiful shade of amethyst velvet, or velour if one prefers it, may be had for the portieres and over-hangings to use in the rose-papered room. A better match would be hard to find, and the dark rich shadows of the plain hangings contrast admirably with the design covered wall.

A double-faced Smyrna rug of amethyst color with a border of slightly darker tone would be perhaps the most inexpensive one to use.—*House and Garden.*

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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

A Uniform Finish.

E. G.—“Enclosed is the floor plan of our house. My furniture for both living and dining room is Stickley's Craftsman. What finish would you suggest for the woodwork? I think I want two tones of brown for walls of the living room and blue for dining room, or would you use same color in both rooms?”

Ans.—Replying to your favor of recent date, a fumed oak finish is advised for woodwork throughout the main rooms of first floor. We think the ceilings too heavily beamed for small rooms and would advise eliminating this feature where it runs through into the hall, but retaining the wide opening. We think the wall tones suggested extremely good and old blue a very agreeable color for the southwest dining room. We should continue the brown tones of living room in the hall, relieving them there with color in the window treatment and in the rugs, dull yellows, touch of red or blue and ecru, with pale ecru ceiling continued on into the upper hall.

A hall seat or window seats cushioned with tapestry combining these colors would materially assist, also a handsome chair seated in the same tapestry. The living room we would keep mostly in the browns and creams, but with bits of color here and there.

Remodeling a House.

L. K.—“As a reader of your magazine I would be interested in your opinion for the decoration of my home that I am now having remodeled.

“Kindly tell me how to have my bedroom floors finished. The casings are white enameled with the doors in birch. They are the one-panel doors. The floor is of the narrow hard pine, laid to a cen-

ter. What color would you suggest for the floor finishing? The furniture in one room is bird's-eye maple and mahogany in the other. What kind of rugs, paper and drapery shall I use in each room. One room is on the northeast with four large windows, the other southeast with five windows.

“On the first floor I have a long hall, dining room, parlor, sitting room and bedroom. The casings and woodwork in these rooms are in the walnut. I wish to lay a new floor and ask you what you suggest. I have thought of using the narrow oak flooring. If I should use this, would you leave it in the natural or stain it? The parlor and sitting rooms are connected together with a large opening and are on the south side of the house. What paperings and draperies would you use in these rooms, what rugs and furniture? The ceilings on the first floor are all 11-foot. The parlor has a large window on the east and two good-sized ones on the south. In the sitting room I have two large French doors opening from the south onto the porch, with window in the east. In each of these rooms there is a fireplace with walnut grates.

“The dining room is 16x18, with walnut grate and large window in the east. On the north I have a large china closet and buffet built in the room. It is beautiful with its mirror back and beveled plate glass doors. It is made of birch. The woodwork in this room is also walnut. The ceiling is beamed and wood paneling around the room five-foot, all walnut. The floor in this room is oak. Would you finish it in the natural or stain to the walnut? What papers, draperies and furnishings would you suggest for this room? Will use new furniture in this room and the parlors.”



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Ans.—Replying to your inquiry as to interior decoration in your remodeled house, it is advised to use sufficient stain on the oak floors to bring them into harmony with the walnut finish. One of the cardinal principles in decoration, and one most frequently violated, is that the floors shall be as dark in tone as the woodwork, at least they should approach the same tone. The bedroom floors need not be stained.

"You do not say whether the birch doors are to be stained or not. In the bedroom with mahogany furniture, we should advise a dark mahogany finish for the doors. In the room with the bird's-eye maple, they should be finished natural. We should put the mahogany furniture in the southeast room and use blue for the color scheme of the wall, rug and furnishings. The bird's-eye maple in the northeast room would be charming with the wall done in a paper which comes in a pale greyish tan slightly broken lines, but having effect of plain, with cap piece on each strip of paper forming a 15-inch frieze of pink roses with delicate, drooping foliage. With a chamber rug in the same coloring and scrim curtains with a border of pink roses and leaves, the bird's-eye maple would have a lovely setting. It is a pity the woodwork is not cream instead of white, as that would be more in harmony.

In the center hall a tapestry panel, either real or paper, above the walnut wainscot would be ideal, with the wall above and ceiling tinted or papered a neutral harmonizing tone, the same carried on the walls of the upper hall. From this hall the southeast parlor would open well, done a Tiffany blend of green and grey with hangings of lichen green and Shawmut rug in three shades of the same

The dining room on the north and east should have a decorative paper in golden tans and autumn leaf coloring above the paneled walnut, with ivory ceiling. A rug in warm crimson with crimson side hangings at the windows would complete a very beautiful room. The birch buffet and china closet should of course be stained to match the walnut. Dining room furniture in fumed oak would be a good choice.

General Suggestions.

T. J. C.—"Please give suggestion as to the decoration. I will try to tell you the colors we had in mind for the various rooms, although they may not be at all appropriate to the scheme you suggest, in which case please feel at liberty to use your own judgment in every detail. We want the upper floor to have white woodwork with mahogany doors. How shall the white pine floor be treated? The room over dining room will have bird's-eye maple furniture."

Ans.—We are glad to give you such general suggestions on your interior decoration as possible without samples of the stains, colors and materials suggested.

Taking up first the treatment of the lower floor, it is advised to use a uniform wood finish thru the halls, living room and dining room. We understand that the trim is plain oak, not quartered, and as the color of stains on plain oak is quite different from quartered, we think Grey Weathered Oak, would be the best choice. Inasmuch as both living and dining rooms have a strong southern exposure, we do not think the yellow brown tones the best to use in these rooms. We should not use mahogany furniture in either of these rooms, nor in the reception hall. Oak furniture with a Craftsman finish, a sort of greyish brown not very dark, would be most in harmony with the woodwork, tho Circassian walnut could be used in the dining room. It is newer than oak, also more expensive. The piano could be placed along with the oak furniture, as, in any event, it must be used with oak woodwork. We would suggest for the living room a library table in the center, of the Craftsman oak, and in front of it, facing the fire with back against the table, a small davenport in the same oak. We would have a couple of oak arm chairs, both these and the davenport upholstered in a small figured tapestry with prevailing tone of sage green. The library table should have a mat nearly the size of the top, of sage green velour or velvet, and there should be a brown wicker morris chair cushioned in sage green velvet or corduroy. The rug should be a Saxony or Shawmut having center of



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plain sage green with border in three shades, lighter and darker. On the wall we would use a paper in blended light browns and greens, what is called a Tiffany Blend. If the brick in fireplace is not already laid, let it be pale brown instead of red.

Now this certain tone of green will open delightfully into the dining room done in dull blues. Of course we cannot enter into all the details here, but these would be given with the other service. There is a delightful paper in soft browns and rose with touch of green in a small tapestry figure, that would be admirable in the lower hall. The parlor woodwork should be pine painted deep ivory, but if oak is already in place, we will use Silver Grey Wood Dye, only it must be applied thin, so as not to be too dark. With this, a wall hung in soft pinkish grey or mauve with old rose rug, window hangings and mahogany furniture. We would use a uniform stain on the floors downstairs, the same stain as standing wood only thinner.

Of course the ideal kitchen and pantry nowadays is all white, and as your kitchen has only a north light, it demands very light treatment. However, Light Buff, really a very deep cream, would be a very good substitute and not so delicate.

The upper hall and bedrooms should have white woodwork excepting the one for bird's-eye maple furniture, where the woodwork should be cream. Mahogany doors should not be used in this room. The pine floors must be filled with a paste wood filler, then two coats of prepared wax. The kitchen and bathroom should have linoleum.

The bathroom should be all white or ivory, but do not use a gilt decoration with nickel fixtures. No decoration at all is best.

The guest room could be made charming in rose and deep creams or a ground between cream and grey, with a deep frieze of pink roses and trailing leaves; Madras curtains to match.

Treatment for a Florida Cottage.

G. N. S.—“I am a regular reader of your magazine and would like some ideas or suggestions on decoration and furnishing of my new home by mail, for which find

enclosed postage. I send floor plan of house. The whole house will be finished in the brown oak stain and waxed. In Florida we want the simple life and things easy to keep. There is a space where front door opens back between that and the folding doors. I had thought of a mission rack here and hall chest or seat. Is not this suitable in living room? I thought of settee between mantel and door going into hall. In this climate we can't have too many built-in things on account of insects.”

Ans.—Replying first to questions about treatment of living and dining rooms, as these rooms have a south and southwest exposure and in your climate, we should advise a wall tone of grayish green, not dark, with ceiling two or three shades lighter in living room. Such a color tone will also best harmonize with the light oak finish, the mixed character of the furniture and the red brick fireplace. The latter we hope is a dark shade of red.

If tints are to be used on walls, we would carry the same color into the dining room, but if possible, use a decorative frieze above the picture mold; either stenciled or paper. A design of grapes or apples and foliage would be very pleasing. A paper frieze should be applied with a tinted wall.

The idea of brown oak furniture in dining room is good. We should use rugs alike in both these rooms and nothing is better for such use than the Wilton Moresque frequently recommended in these columns. It is handsome, will stand hard wear and comes in soft, rich colors. We sympathize with your preference for large rugs and cannot endure small rugs kicking around. A ready made rug, large enough for your living room would cost nearly \$100, as it should be 17 or 18 feet long and these special sizes are very expensive. But a mossy green Wilton Moresque 10 ft. 6 in. x 17 ft. can be made to order for about \$60.00, plain, without border. A smaller one 9x12 ft. for the dining room would cost only about \$30.00. I know of nothing else so really good for that money. We have had these rugs made and shipped by freight to a number of clients who are extremely pleased with them.

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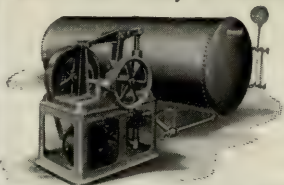
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In regard to new furniture for the living room, we would not put a hat rack in this room. It is a pity that two feet of depth under stair was not recessed back from living room and there the hat rack with seat beneath could have been placed, while there would still have been ample space back of this for the coat closet with door opening into the hall. If it is now too late to do this, you could have a simple wall hat rack in the hall, without any seat. The new table we would get in nearly the same finish as the other pieces, but any other chairs we would get in light brown wicker and upholster in green English cretonne. Also a wicker couch upholstered the same. If the wicker would be too expensive, have a couch made. It is truly a pity that a dark mahogany stain was not used on woodwork of music room, since pine takes this stain so well and since you have all those old mahogany pieces. It might still be done, as the wax finish is easily removed.

The blue rug will be excellent here and a Favre blend paper, showing blended tans with tint of dull rose on the walls, pale ecru ceiling. If possible, take off the old hair cloth and do over the chairs in deep blue corduroy. Use plain scrim curtains throughout the lower floor. All the floors should have a brown stain.

Upstairs the floors can be finished natural. Your daughter's room will be very pretty with a wall of blue chambray paper running a narrow rose-vine border around it. The rugs can be Priscilla rag rugs, blue centers with striped borders on ends of pink roses on white ground. Curtains of white scrim with rose-vine border on edge. Such curtains can be had here for 35c yard.

For your own room with the cherry furniture, we suggest a light green wall with grayish green matting for rug. There is a charming cretonne in light greens with wild roses and honeysuckle that would add an effective note, used to cushion chairs, a dress box, etc.

With oak for boy's room, the woodwork should be painted a dull sage green and the white iron beds the same.

In regard to shades for windows, the exterior color of the house must largely govern the selection.



Oak Flooring

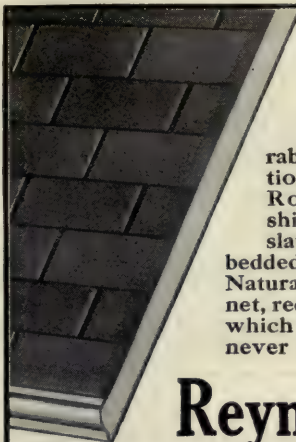
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- ¶ OAK FLOORING $\frac{3}{8}$ " thickness by $1\frac{1}{2}$ " or 2" face can be laid over old floors in old homes, or over cheap sub-floors in new homes at a very low cost. It is cheaper than carpets or Pine Flooring.
- ¶ OAK FLOORING laid forty years ago in public buildings, after very hard service, is still in good condition. For durability, OAK is the best.
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Who Would Be a Servant?



S I am writing, one of the New York papers is carrying on an active controversy as to the relative merits of housework and other employments for women. With the merits of the question I have nothing to do, except to remark that it is utterly impossible for me to understand any person of refinement accepting the social conditions of domestic service. But the thing that emerges from the discussion is the fact that the average mistress seems to be exacting to the last degree and richly to deserve all she gets in slovenliness and impertinence.

Women write about living in places where they began work at seven in the morning and did not get through till after eight at night, and had no time to themselves during the day in which they were free from interruption. It would seem that domestic service is a region remote from all the precepts of common humanity to say nothing of the obligations of the Golden Rule.

The average woman is not inhumane, nor is she inherently selfish, but when she comes to the matter of the treatment of servants she seems to be dominated by a set of inherited traditions and prejudices that swamp her moral perceptions entirely. The solution of the domestic problem is largely a matter of intelligent putting one's self in the place of the servant, and of conceiving of her as endowed, not with the same refinement and taste, but with the same physical organization and the same need for recreation and variety as one's self.

Time was when the average servant was extremely strong physically. She

was usually a peasant from Ireland or Germany, or a negress accustomed to work out of doors in the South, and she was very nearly as strong as a man, capable of working long hours without exhaustion. Today we are dealing with the second generation of immigrants, born in tenement houses and poorly nourished. They have far more aches and pains than ourselves who have lived all our lives in sanitary surroundings, under good hygienic conditions, enjoying the benefit of abundant exercise and of athletics in one form or another. We wear shoes that fit our feet, we stand properly; our backs do not ache and our feet do not swell if we have to do housework. We have had the sort of mental training which enables us to arrange our work systematically and to do it with the least possible expenditure of energy. We have also an intellectual outlook which lifts us above the thought of drudgery even in very commonplace tasks, and more than all these we work for our own advantage and not for that of another person.

The very first duty of the housewife with a new maid ought to be to teach her to do her work to the best advantage and with the least effort. You have done a great deal when you have taught a woman of her class to stand properly, to keep her spine straight and to kneel instead of stooping. The difference at the end of the day's work is incalculable. To teach her to plan her work to advantage is more difficult, and some women never learn. In that case, you must simply make up your mind to do her thinking for her. If her mental processes were expert she would not be in your kitchen. And side by side with this help should go the

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ARCHITECTS: Descriptive details of Morgan Doors may be found in "Sweets Index" pages 1004 and 1005.



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Morgan Millwork Co., Baltimore, Md.

disposition to let her do her work in her own way, as long as the result is satisfactory and she does not take too much time. Particularly does this apply to cooking. Rule of thumb may be incomprehensible to you who are tied up to your particular cookery book but, if her cake is light and her drawn butter smooth and savory, what difference does her process make to you?

Every place has its custom as to days out, its irreducible minimum of privilege, arranged originally to protect the maid in her right to a certain amount of leisure and recreation. We hear a great deal about the minimum wage, but no one proposes that it shall be universal. There would seem to be no good reason for keeping a maid in on abstract principles. A good many people seem to need to realize that the sort of formal social life which is inseparable from the idea of perpetual service cannot be adequately kept up by people who have only one servant. On this point there is a good deal of illuminating discussion in that very charming book, "Home Life in Germany," by Mrs. Alfred Sidgwick. What if one of the family has to answer the bell in the evening? Is the inconvenience or annoyance sufficient to make it necessary to keep a maid at home from her business or her pleasure on the chance of a visitor? If one has little children it may be necessarily occasionally to keep the maid in at night, but it is easy enough to give her some time off in the day time to make up. Most of the difficulties of domestic service will disappear when we mistresses recognize the fact that housework is a good deal more arduous than other kinds of employment, and that the day, although it cannot be arbitrarily fixed as to hours, ought not to be longer than the factory or store day. And we must also take into consideration that the isolation of the domestic worker makes it all the more imperative that she should have liberty to use her spare time as she pleases. She is not of our class, she would not be a satisfactory servant if she were, but she is of the same body, parts and passions as ourselves, and entitled to the same consideration as if she were our social equal.

Does It Pay To Make Preserves?

Every year more and more people answer this question in the negative, many

of them because the conditions under which they spend their summers make anything of the sort quite impossible. It does not pay to make preserves when you have to give prohibitive prices for your fruit, in addition to the expense of freight charges on jars and glasses and on the finished product. People so situated find it cheaper and less troublesome to buy what they want.

But for people who are at home nearly all summer it certainly pays to make preserves, unless the family is exceptionally free from "sweet tooth." Right here a few figures may be in order. Last summer the writer spent several months in a house on the outskirts of a New England city, and made preserves not only for her own family, but for a cousin who was absent from home for the summer. There was a good deal of fruit on the place, and cherries, currants and gooseberries may be left out of the calculation, also grapes, of a very ordinary sort, but very good when spiced. Other fruit was bought of an ordinary dealer, at what seemed a very high price, as compared with the current rates of the New York markets. Nor was sugar at its lowest rate at that time. Allowing for these drawbacks, the cost of peach preserves, in a heavy syrup, three-quarters of a pound of sugar to a pound of fruit, was twenty cents a quart. Damson plums cost seventeen cents a quart and crab apple jelly four cents a glass. It seems as if it were worth while, does it not? Canned tomato, made from thoroughly ripe, selected fruit cost about four cents a quart. Chopped pickles and a capital imitation of Crosse & Blackwell's chow chow cost less than eight cents a quart, and tomato catsup about six cents a quart.

Given a suitable place in which to keep preserves and a very limited amount of spare time, a well filled preserve shelf is at any one's command, and is a wonderful comfort, not only in an emergency but as a means of supply wholesomely and economically the perfectly legitimate craving of the human system for sugar in some form or other. And in these days of obscure forms of intestinal poisoning, it is something to be sure that you are not using articles of food that may be chemically colored or flavored.

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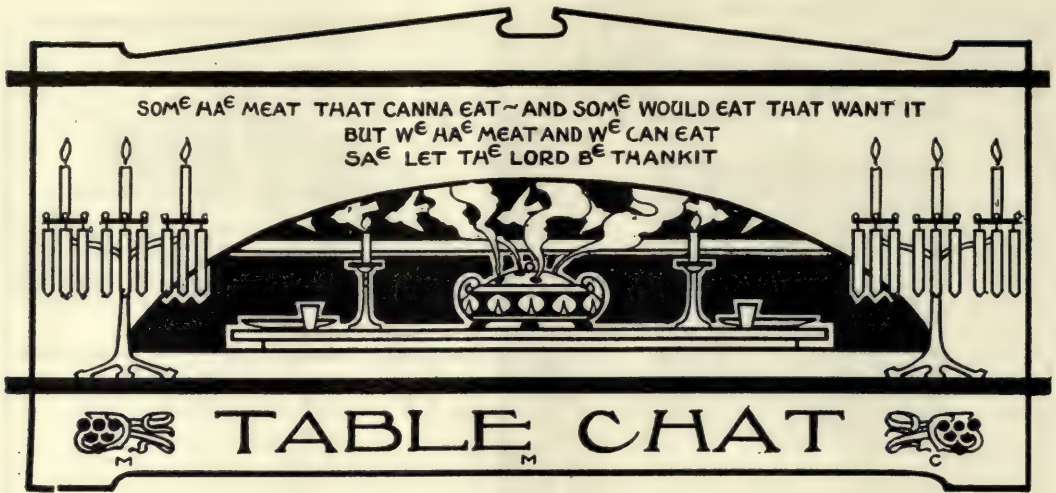
If you are planning to build a new home or to remodel an old one you will be interested in reading The TUEC Book. It will make clear to you a great many things you had never understood concerning sanitary housekeeping. It will also show you how you can insure your home against dirt and the troubles, annoyances and diseases that are due to the presence in the home of the fine particles of dirt that ordinary methods of cleaning can never overcome.

Write today for the book. It is free and no obligation is involved. Let us assist you in planning for the cleaning system for your home. This service is also gratis. We have a representative in your vicinity, no matter where you live and any communication addressed to us will be referred to our expert in your locality. **Write today.**

The United Electric Co.

10 Hurford Street,

Canton, Ohio



June Roses and Ginger Jars



WHILE it is perfectly true that flowers are beautiful anywhere, it cannot be denied that they gain by an appropriate setting, and even the queen of flowers has a choice of

green glass, although there are some grays that are exquisite with yellow. White roses are charming in colorless glass, plain not cut, and they need a good many of their own leaves. I never see



JUNE ROSES AND IN A GINGER JAR.

vases. One of the very prettiest receptacles for roses of varying shades of pink is a ginger jar, one of the old fashioned sort, decorated with a brush, in gray blue tones on a pearly white ground, and the sketchier the ornamentation the better the effect.

Yellow roses, I think, look best in

any of the red or deep pink roses without recalling the account of a dinner at Newport, in the days when bare tables were a novelty. There was a square of costly lace under a silver bowl of American Beauty roses, and all the service of the table was of solid silver, with absolutely nothing to break the exquisitely polished



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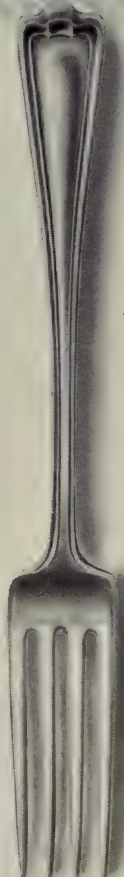
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The World's Largest Makers of Sterling Silver and Plate.



OLD COLONY



CROMWELL

TABLE CHAT—Continued

surface of the mahogany. While the silver dinner service may be impracticable, some of us have silver bowls, though they may be plated.

Commencement Spreads.

This is the month of closing schools and all the pleasant flurry of class days and commencements, and, as man must eat, the preoccupation of very many people is how we shall feed him to the best advantage at the least expense. A caterer, of course, makes the whole thing

resses should be provided with trays large enough to hold three plates, with room at one end for the napkins and forks. Plates of extra sandwiches can be circulated after everyone is served. Damask napkins are more elegant but pretty paper ones are quite good enough, particularly if they are those very charming ones with inch-wide borders of pink or green and lines of gilt.

It simplifies the service of a large number if the coffee is served from a different point in the room from the salad. An



INDIVIDUAL SERVICE OF SHERBET AND CAKE FOR CLASS DAY SPREAD.

very easy, but at an expense which most classes ought not to afford, if they do. The easy way is apt to be cruelly hard for someone, and nowhere more so than in school.

It would seem as if every requirement were satisfied by a salad and sandwiches, some sort of ice cream and cake, with a constantly replenished punch bowl of lemonade. The June days are warm enough to make cold food agreeable, and such a collation can be gotten ready in the morning and leave everyone free for the fun and frolic of the afternoon, always taking it for granted that some of the elders will take charge of the serving.

It saves a great deal of time if the salad is served from the pantry, with the sandwiches on the same plant. The wait-

urn is very ornamental, but a relay of large pitchers is more practical, as you can pour so much more quickly. One person ought to take charge of the coffee, and study out the service before hand. As most people use cream, it is just as well to put it in the coffee in bulk, keeping a pitcher clear for the exceptional ones. Then only the sugar need be passed. There are always little sisters and brothers who are enchanted to pass the sugar bowls, and will do it most conscientiously.

If possible serve ices in sherbet glasses, setting each glass on a plate which will answer for cake. Of course you must serve bricks of cream on the plates. But cream in bulk will go further in sherbet glasses and they are not so sloppy.

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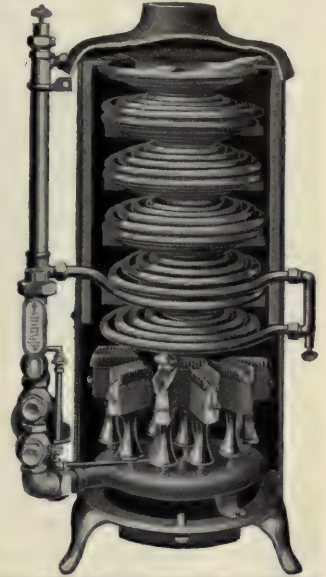
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Effective use of Beaver Board in a large Training School at Lebanon, Tenn.

TABLE CHAT—Continued

Just What to Have.

Chicken salad is rather taken for granted, still there are other things that may take its place for a substantial. Jellied chicken, sliced, laid on a couple of lettuce leaves and dressed with mayonnaise is very nice. So is chicken mousse. Most people like boiled salmon with tartare sauce, but you must have an alternative for the few who do not. Or you may have pastry cases heated and filled with creamed chicken or sweetbreads.

When it comes to sandwiches, the simpler the better. With chicken salad, have plain bread and butter and devilled ham. With jellied chicken, ham and pimento cheese sandwiches. With boiled salmon serve plain bread and butter, brown and white, and green pepper sandwiches. With chicken or sweetbreads in pastry cases serve buttered rolls. Whatever is served should be in such shape that it can be eaten easily. The sandwiches should be of moderate size, crustless and so made that the contents will not ooze out at the sides.

The very nicest thing possible for a June "spread" is strawberry ice cream, made from the fresh fruit, which is universally popular and as pretty as it is good to eat. The next best thing is a Philadelphia vanilla cream, with fresh strawberries. I think it is always a mistake to serve the soft and sticky, even if delicious layer cakes, on such an occasion. To serve them with ice cream is to gild refined gold and paint the lily. Also they are troublesome to make and involve the use of an extra fork. The mention of forks brings up a mooted question. Shall you or shall you not pass forks for the ice cream? It is the elegant thing to eat ice cream with a fork, but not everyone is elegant, and spoons are safe. Why not have one of the little sisters follow the tray with a basket of silver, spoons and forks, laid side by side.

This is an interlude. For cake you can do no better than to have an abundance of a fairly rich white cake, covered with a thick white icing, and cut in blocks, with an equal supply of chocolate loaf cake, iced with chocolate.

The Contents of the Punch Bowl.

I think we shall all agree that a school spread is no place for any drink, even re-

motely alcoholic. Nor are the tastes of youth sufficiently exacting to look for a subtle mixture of flavors in the contents of the punchbowl. We shall do very well indeed with lemonade, sufficiently strong and sweet, and above all abundant. It gets a touch of sophistication from an addition of apollinaris, or of plain soda water, and a sprinkling of candied cherries, but neither are essential.

The Old Fashioned Strawberry Short Cake.

Just how you make your strawberry short cake depends upon the temperature at which you intend to eat it. If cold, by all means use a pastry crust, the richer the better, but not puff paste, just a rich, flaky, "family piecrust" with plenty of butter, some rubbed in and some spread on. Cut into four-inch circles, baked delicately, and when cold, filled with crushed and sweetened berries, it is a delightful sweet, but hardly a shortcake.

But for the other sort, which is served neither quite hot, nor yet cold, you must have a nice biscuit crust, mixed with milk, and shortened with butter. Some people use lard, and I am told that butterine is excellent.

The dough must be as soft as you can handle it. Roll it and cut from it two circles. Lay the first in a buttered pie plate, rub a little melted butter over the top of it and put on the other layer. Bake in a quick oven, separate the two layers and butter them liberally, put a thick layer of crushed and sweetened strawberries between them, put the cake on a plate and cover it closely, leaving it in an open oven or on the side of the range till serving time. Serve with cream.

An easier way of managing the layers is to mix your dough no thicker than a cake batter, pour half of it into the pie plate, lay a circle of waxed paper on it and then pour on the rest of the dough.

A Strawberry Pudding Sauce.

When a tablespoonful or so of strawberries or raspberries are left over, plan to have a bread or batter pudding the next day. Make a good hard sauce, crush the strawberries and add them to it, beating it well and adding a tablespoonful of brandy.



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Roberds Ideal Wall Board

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And when it comes to cost—well "PEARL" outlasts ordinary screening by such a long time that it easily is the most economical screen you can buy. But make sure of getting genuine "PEARL" by looking for the mark of identification—two copper wires in the selvage.

The best hardware dealer in your city sells Gilbert & Bennett PEARL Wire Cloth. See him and "PEARL" at the same time. Or—if you prefer—write our Chicago office for samples and complete information.

Architects

Find out about Pearl Wire Cloth. Send us your name and we'll send full particulars and samples.

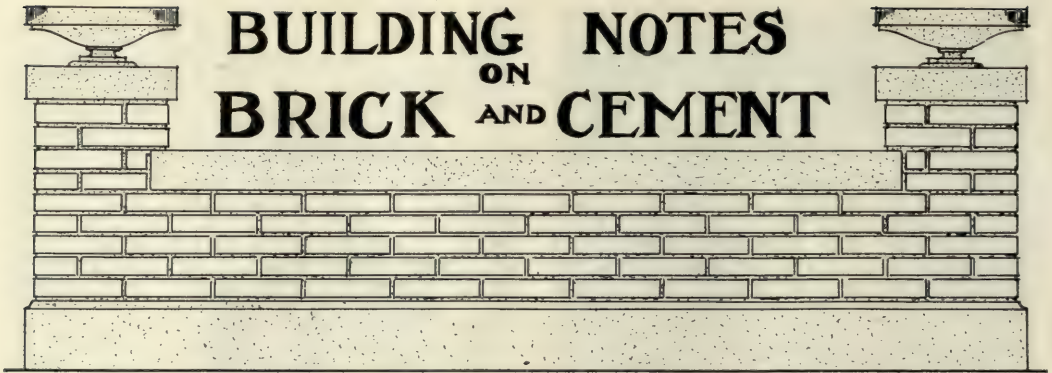


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The General Fireproofing Co., Youngstown, O., sends this note of warning to readers of Keith's Magazine:



ARE you wasting large quantities of concrete?

Every year—every day, in fact, the leaders in concrete construction are realizing more fully that less bulk and weight are required.

A thinner slab, properly reinforced, will give the same strength as a thicker or heavier slab with less efficient reinforcement.

But what is the proper reinforcement? A reinforcement whose center of gravity is as near the bottom of the finished slab as possible—a reinforcement which is working in every inch of area—a reinforcement, every ounce of which is in tension and carrying its share of the loads.

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The heavy longitudinal ribs of Self-Sentering are spaced $3\frac{1}{2}$ inches on centers, while the connecting fabric is of the true diamond mesh type. Every ounce—every strand of Self-Sentering is doing its share, because the metal is continuous and there are no breaks at right angles to the line of stress.

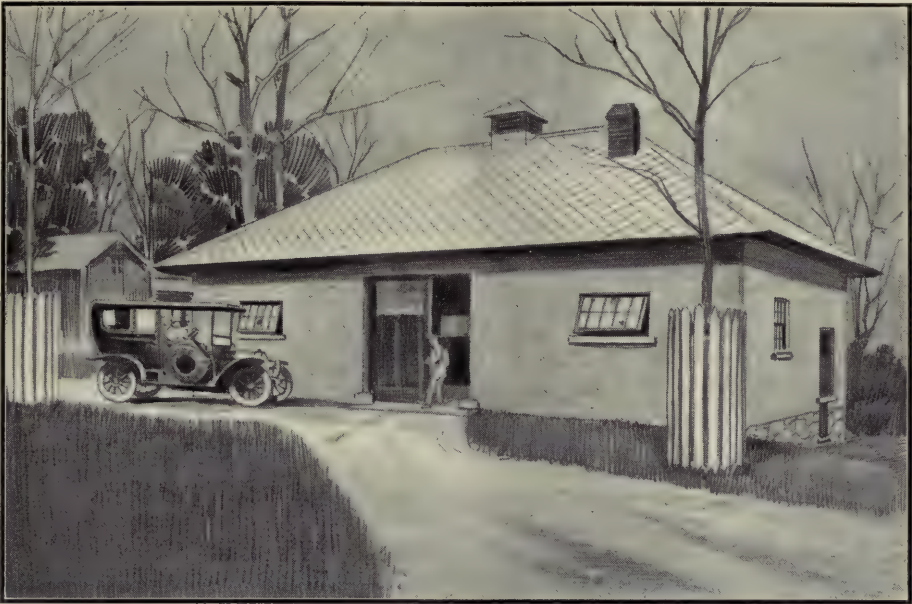
How Bricks Are Made.

Since our ancestors first built themselves huts of earth, centuries have brought changes and improvements in bricks and brickmaking. The first crude, hand-shaped, sun-dried blocks of clay crumbled ages ago. Even Pharaoh, that famous brickmaker of antiquity, was outclassed by the people of Babylon as well

as by the Greeks and the Romans. The long thin brick so effective in many of our fine houses today is called Roman because the conquerors used that shape twenty centuries ago.

In the making of one nineteenth century brick, I followed the whole process of making a modern brick from the mines whence the clay comes to the cars in which the finished bricks are shipped to their destination. The clay from which the buff bricks are made, and which, by the way, looks like hard gray stone, is far underground, while the red clay which is mixed with it to make the necessary varieties in color, comes from outside. The in-flaw, are taken to the cars and packed for shipment which takes place under the strong light from a great sky window is very thorough. The bricks that are whole and sound with no chipped edges nor broken corners, in fact, those that are without shipment.

This is the story of a simple, dry pressed brick—plain buff, gray or red. When the surface of the brick is glazed or enameled or different in any way from the foundation clay there are additional processes. Experiments are first made in the laboratory until a "slip" is obtained of the required color and consistency. The face of a plain brick which has already been made and fired is dipped in the slip. After dry the brick must be fired a second time. The different tints that can thus be given to the bricks are almost endless and the shapes are varied as the colors. For they are by no means all made with flat surfaces and square corners, but are rounded, triangular or any form that is needed in modern building and the faces are ornamented with curves



Garage of Stuyvesant Fish at Garrison-on-the-Hudson, N. Y., roofed with Asbestos "Century" Shingles by Joseph Davis, contractor, of Garrison-on-the-Hudson. Reproduced from an Artist's drawing.

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and angles, graceful arabesques and even elaborate modelings of fruit and leaves and flowers.

In describing the actual manufacture of the bricks, I have said almost nothing of the artistic side of the work. The possibilities here are infinite. Not only do the colors range from a creamy yellow to buff and dark brown, from palest terra cotta to that deeper shade whose name is brick red, or from the faintest, most delicate gray to the darkest of stone colors, but there are bricks whose manganese speckles make them look like granite from the New Hampshire hills and others that are white and glistening like marble. The faces of others are chiseled by hand into the semblance of rough-hewn stone.

Again bricks are not only ground for doorways and arches, and embossed and ornamented for moldings and cornices, but are pressed into shape for massive cornerstones, or into circular blocks from which to build mighty buttresses or slender, graceful columns.—*The Building Age*.

The Ideal Concrete House.

The ideal house of concrete is one with a flat roof, crowned by a parapet or some simple perforated patterning such as one sees in the country barns of Italy for airing the hay. It is better to avoid the stereotype balusters and moldings (which have so long been associated with stone work), not because of any difficulty in casting, but simply to avoid stamping concrete in imitation of stone.

The flat roof is suggested in preference to the pitched because it is obviously cheaper and is the natural form. Shingle or slate roofs are pitched to insure a dry interior; a flat shingle roof would, of course, offer but little protection from water. The flat concrete roof, when composed of a rich mixture and properly done, is a perfectly practical roof. When covered with flat tiles of a pleasing shade it makes an ideal roof-garden. In favoring the flat roof it is not to be understood that the pitched roof is impracticable. It is simply more costly, necessitating a rather cumbersome roof construction and is created only for exterior effect. If the visible roof is desired it should be kept as simple as possible, for the complicated roof of the frame house with innumerable

dormers is really quite out of the question in concrete. —*House Beautiful*.

Cement-Asbestos Roofs.

You are building a house and are ruled by economy. Fireproof shingles cost almost double the old-fashioned kind, the difference being perhaps, \$50.00 in all between a roof of wood and of cement-asbestos. You put \$50.00 into your pocket and consider it economy. Fifteen years from now, or perhaps less, a neighbors' house or your own chimney catches fire, a brand drops on your roof, the seasoned shingles are ablaze in a minute, the attic is filled with smoke and before the fire department gets a lead of hose to your house the blaze has done \$500.00 worth of damage. Insurance covers the actual monetary loss, but how about the inconvenience, the nervous shock and the possibility of loss of life and complete loss of your property. All of this to save an investment of \$50.00. Does it pay?

* * *

Thousands of years ago people "went up on house tops." They made 100 per cent use of their homes. They lived inside or on the roof, according to the weather.

We build roofs at considerable expense and usually so steep as to be uninviting even to squirrels. Overhanging trees serve only to drop leaves into the gutters. Sheer waste.

At one time we could not make a flat roof that would be tight and lasting. Today a watertight, concrete slab roof is a real economy over the steep pitched roof covered with heavy tile and far preferable to a shingled affair, a constant fire menace.

A flat roof, a simple parapet wall for protection, an overhanging tree, these are elements, which added to the average city house would give summer comfort. This would be efficient house building.—*Portland Cement Bulletin*.

Concrete and Brick.

At Northampton, Mass., a novel retaining wall has just been built that is effective both as to design and structurability. It consists of concrete with a four-inch facing of brick. The concrete part of the wall was built up in the usual way, prop-

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Stuccos which become mottled, stained and discolored by iron and foreign matter contained in the sand, spoil the effect of many good architectural designs.

Sand, which is necessary in most stuccos, contains iron and other foreign substances which cause stains. Sand stuccos also lack the elasticity necessary to resist cracking when the frame construction beneath them dries out and shrinks.



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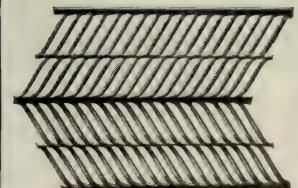
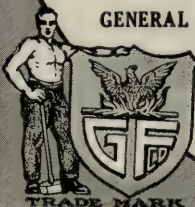
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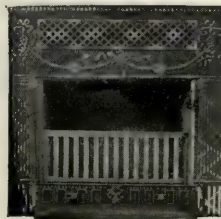
Keith's, June, '13.

BUILDING NOTES ON BRICK AND CEMENT—Continued

erly stepped at the back to prevent bulging and thoroughly reinforced with steel rods; but it was in combining the brick with it that the unique feature was evolved. For the brick, obviously, could not be built up simultaneously with a plastic material that must be poured into a mould and allowed to set. The difficulty was overcome in the following ingenious manner:

First the height of the brick courses, including joints, was carefully figured out and every fifth course was marked on the inside of the wooden form that was to support the wet concrete. At these points two-and-a-half by four pieces were fastened to the form, edge on, so that when the concrete had hardened and the form was removed, long slots the height of a brick course, four inches deep and five courses apart, appeared in the face of the solid wall. With the aid of these it was a comparatively easy matter to lay up the brick, bonding every fifth course, with all headers, into the corresponding slot. In this way a perfectly satisfactory piece of masonry was produced. Even with such thorough union of the two materials, however, water could still have soaked through and lodged between them (which, if it froze in winter, would have produced the inevitable bulge), had the precaution not been taken to cut a number of weep holes through the concrete and to omit the corresponding half brick. In addition the back of the concrete was waterproofed before filling in. We give this process as a good suggestion for garden retaining walls where the color of concrete might be considered too cold and uninteresting for the general scheme.

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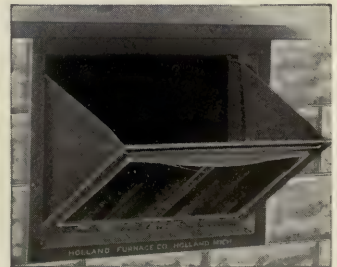
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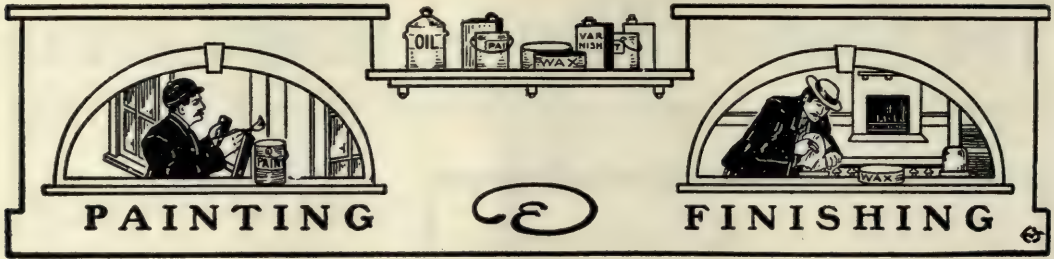
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Painting Interiors of Steel Tanks.

WE were recently asked to advise how to paint the interior of a steel tank to be used as a swimming pool having an interior surface of about 1,000 square feet. It is well known that such tanks are difficult to maintain, because the paint is softened by the continuous soaking in water. Obviously a hard paint is required, yet it must not flake off. We therefore must get, first, a clean metallic surface to paint on, which is best done by sandblasting, but may be had by scraping and wire-brushing; and on this apply a fairly elastic, adhesive priming coat.

We will, therefore, to 90 lbs. high grade dry red lead add, say, 17 lbs. fine litharge (as we shall need about 112 lbs. pigment); and to 40 lbs. of this mixture add one gallon boiled oil (boiled oil resists the soaking action of water better than raw oil); and it will make a better working mixture, if we add also a half-pint or so of turpentine. This is for a priming coat and should be allowed to dry hard all through.

On this surface put two coats composed of 72 lbs. of the red lead and litharge mixture and $\frac{3}{4}$ gal. boiled oil and 1 gal. turpentine; each of these must be allowed plenty of time to harden.

On this as a substantial foundation apply two coats of flat white lead made by thinning 75 lbs. paste lead with $1\frac{1}{2}$ gal. turps. and 1 pint of dryer. This will make a fairly white surface, not soft enough to absorb much water, on which two coats of some good white enamel paint should be applied. Such an enamel should be made from a high-class varnish, made with hard varnish gums, and white zinc (not lithopone) or a mixture of at least two parts zinc to one of white lead for the pigment. Such enamels are made by all the best varnish-makers, and

should be such as the makers recommend for the purpose. It will take four or five gallons of a rather high-priced enamel paint for this job; this is, so far as material is concerned, the costly part and each of these coats should have plenty of time to dry. Enamels contain comparatively little pigment and a good deal of vehicle and cannot be hurried. Naturally they are not very opaque, so they must be put on a white under-coat.

Such a job, if well done, should last well, but remember that if everything else is all right and the original iron surface is rusty or dirty, even a little, it is all liable to come off; so look to the cleaning of the iron before all things.—*Dutch Boy Painter.*

"Paint Problems," Solved by The "Dutch Boy Painter."

Mixing Red Lead.

Many painters add water to red lead when mixing it. Does this improve the red lead?

This is a custom which has been followed in the past to moisten dry red lead so as to have it in paste form. Whenever this is done it is, of course, mixed with oil before it is used. So far as we can learn the custom has nothing whatever to recommend it. The oil ultimately drives out the water so that the water evaporates, having no effect on the paint one way or the other, except that it may cause more or less dampness on the inside of the paint coat. Such dampness is a detriment rather than a benefit. It is best to leave the water out of the red lead and mix the red lead and oil together by adding the oil gradually, making a stiff paste at first. This prevents the lead and oil from becoming lumpy.

Preparing Plaster Paris.

I find that plaster paris sets very quickly when mixed with water, making it nec-



One of the illustrations shown in our Portfolio. The painting specifications for this house are:
 BODY—S-W Gloss White
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PAINTING AND FINISHING—Continued

essary to work very rapidly in pointing up a wall preparatory to painting it. Is there any way of overcoming this tendency of plaster paris to set?

This trouble can be almost entirely overcome by pouring the water on the plaster and letting the plaster absorb it. Do not stir or mix them. Preparing plaster paris so that it will not set quickly can also be accomplished by adding glue-size to the plaster and water.

Stone Ochre.

Will you kindly explain what is meant by stone ochre?

Stone ochre is a name referring to color, i. e., stone color. Ochre is normally yellow shading toward brown: so that stone ochre is not ochre at all, but is a filler tinted to suit the taste of the buyer. Stone ochres are commonly made of barytes with as much lead as the price will allow.



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Minimizing Corrosion in the Hot Water Supply System.



IN a paper on the "Durability of Welded Steel Pipe," reprinted and commented upon in Engineering News, Mar. 23, 1911, there was discussed the results of investigations on the relative corrosion of iron and steel in service, and the influence of the dissolved gases (oxygen and carbonic acid) in water and a scheme was suggested for rendering the water practically harmless by removing the air after heating. So far as the writer is aware, however, no system has yet been designed with this as the main object.

In the paper referred to, the writer pointed out, first, that the superiority claimed for "genuine" wrought-iron pipe had not been proven by comparative tests in service; on the contrary, the numerous cases which are on record (and which have been largely added to since that time) show conclusively that where both iron and steel have been used together in water lines, the wrought-iron pits just as badly as the steel under the same conditions.

These results again indicate that the intensity of conditions have much more to do with the corrosion than anything else; so much so that the same material used as a pipe in a hot-water heating system, where the water is practically free from oxygen and unchanged, should last 50 years or more, while in a closed hot-water supply system it may only last five or six years.

This principle of heating and freeing the water from dissolved oxygen, by which it seems possible to prolong the life of standard welded pipe several times, is surely worthy of careful consideration in designing piping systems which are subject to corrosion.

A recent investigation, undertaken by the writer with the assistance of some of his research staff, has developed interest-

ing points in regard to the present practice of laying out hot-water supply systems. The influence of the arrangement of the piping on corrosion seems to be quite marked, depending on whether the gases are liberated before the water enters the distributing system or not, although the separation of these gases is only partially accomplished under the best conditions.

Upon this paper, the National Tube Co., Pittsburg, Pa., comments as follows:

"The facts cited by Mr. Speller appear to abundantly demonstrate that the most active agent in causing the corrosion of iron or steel immersed in water is the air and other gases which are contained in solution in the water. It is quite generally understood by engineers that water containing a large amount of carbonic acid gas in solution is apt to cause an abnormal amount of corrosion, but it has been frequently supposed that this was because water charged with this gas became a weak acid. Mr. Speller makes it clear, however, that ordinary air dissolved in water can cause active and serious corrosion, especially if the water is heated."

"The practical lesson to be drawn from these facts is that provision should be made wherever possible for removing the dissolved air and other gases from water before it circulated through pipes, boilers, etc., where these gases may do harm. By heating water to the boiling temperature in an open type of heater, the dissolved air and gases will be pretty thoroughly removed; and the life of the pipes through which the water has to pass should be materially increased by this simple precaution in design."

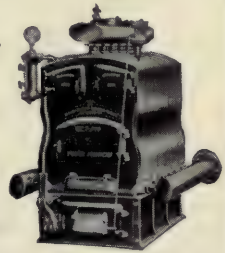
Application of Refrigeration.

Residence Systems and Other Small Plants.—Mechanical refrigeration is so much more sanitary than refrigeration with natural ice that refrigeration systems are pretty generally installed at the



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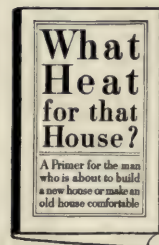


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Principal Cities

present time in large residences, apartment houses, hotels, institutions and stores where perishable goods are handled and sold. The general use and distribution of electric current makes the operation of a system automatic in operation as well as inexpensive. Mechanical refrigeration has consequently supplanted natural ice in most industries, and is found almost indispensable in breweries, distilleries, abattoirs, packing houses, market houses, butcher shops, fish curing establishments, fish markets, dairies, creameries, milk depots, confectionery and ice cream manufactories, oil refineries, chemical works, morgues, bottlers, hotels, restaurants, club houses, asylums, steamships, general cold storage houses and for cooling water in office buildings and other large structures.

Portable refrigerating machines of small capacity mounted on a solid base so the entire plant can be easily transported from place to place are now made. In the March "Modern Sanitation" is shown a machine of this description made by the Remington Machine Company. It is made in two sizes, having capacities respectively of one-quarter ton per twenty-four hours and one-half ton per twenty-four hours.

These machines are especially suited for the cooling of refrigerators or small cold-storage rooms of from 200 to 1,000 cubic feet capacity, depending on the temperature required. The machine is erected on one base with condenser and fixtures connected together, all properly valved, so all that is required is the pipe

coil for the cooling of the refrigerator or storage room. It will be noticed that the compressor is belt driven, and the machine requires from one to two horse-power for its operation, depending upon the size of the machine.—*Modern Sanitation.*

Location of Registers in Houses.—It is improbable that there will be any great difference of opinion among those experienced in the trade as to the location of registers in houses in which furnace heating equipment is installed. The majority of experienced furnacemen favor the shortest possible pipe from the furnace and the register located near one of the inside rather than near one of the outside walls. It has been given as the experience of successful, observing furnacemen that registers near the outer walls are not so efficient as if placed contiguous to the interior walls of a room. With any system of heating the warm air at the ceiling, on approaching the outer wall strikes a cooler surface and falls along the wall increasing in velocity as it follows down the cooler wall until it drops with some positiveness near the floor. Consequently, when a warm-air register is located in the path of these down currents the warm air that should rise from it is retarded and in some instances the outflow is entirely stopped. This leads to a down current of this cool air through the pipes to the furnace, if the furnace is not adequately supplied with air from some other point. Invariably to locate a register near an outer wall means a longer pipe with an attending loss of heat in the cellar. There have been those who have observed that the location of a radiator and a register are selected from directly opposite points of view. Radiators as a rule are placed under windows where the greatest amount of cold air falls so that they can warm it as it falls or drive conflicting currents of warm air against it while the radiator proper sends its heat into the room. Registers should be so located that the warm air from the heater will be carried as quickly as possible from it to the rooms, where it will diffuse through the room in such a way as to warm it before it is chilled too much by contact with the cooler surfaces of the exposed walls.—*The Building Age.*

Steel Hot-Water Heating Boiler

Other Material
at Very Low
Prices

\$54⁵⁰

This boiler is a wonderful bargain at this price which is made on first 100 sold. Will heat an eight-room house. Burns any fuel. Requires no cleaning. Send for folder. **Andrews Big Heating Book** tells all about the best heating plants, sewage disposal systems, thermostats and other modern devices. Write for it. Estimates free.

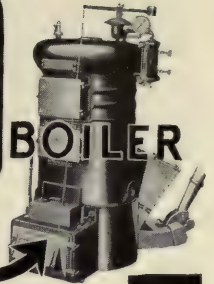
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UNDERFEED

Cuts Your Coal Bill
1/2 to 2/3



WHILE the people are looking to Congress for legislation to reduce cost of food and clothing, the **Underfeed** has already solved for *all time* the problem of *lowering* heat costs. NOW you can enjoy *clean, even, genial* warmth at a saving of 1/2 to 2/3 of the amount you have been accustomed to pay for coal. Home Owners and Home Builders investigate! Our FREE BOOK tells most interestingly the *reasons why*. Ask **Underfeed** users *anywhere*.

Mr. C. P. Prescott, 115 Henry St., Binghamton, N. Y., an **Underfeed** Boiler user writes:

"Our coal bills have averaged for the last three years less than \$50 a year, whereas we previously heated materially less space with what we believed the best Topfeed Boiler on the market at an annual cost of over \$100 for fuel."

Mr. Hans Peterson, 1816 Villa Street, Racine, Wis., writes:

"My **UNDERFEED** Warm Air Furnace has been in use seven winters and has paid for itself long ago — it saves more than half."

In the **UNDERFEED** inexpensive grades of either *hard or soft* coal, costing \$2 or \$3 less per ton, is *pumped up* into the fire-pot *underneath* the fire, and candle-like, burns from the top down. RESULT: perfect combustion and *more* heat from *no more* tons of *cheaper* coal.

THE PECK Williamson Underfeed FURNACES BOILERS

Smoke and gases, wasted up Topfeed chimneys (40 to 50 cents of every dollar you pay for coal)—are forced by the draft to pass up through the flames, are consumed and make *more* and *cleaner* heat.

No soot-covered, hard-to-clean, heat-retarding surfaces. The fire, always on top, is in close contact with clean, heat-responsive metal. No clinkers and few ashes. Send coupon for Free Book. Free Heating Plans and Estimate of Cost.

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A Toilet Combination

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PROPERLY installed, the Pfau White-Copper Tank makes any toilet operate so silently that it can't be heard outside the toilet room. It is delightfully small yet it is most efficient and so simple that it will last practically forever with no attention beyond an occasional new washer or rubber ball.

If you have an appreciation of the beautiful in home equipment, the perfect adaptation of means to ends and that exquisite taste that is the hall mark of true refinement, you will find permanent satisfaction in the Pfau Toilet Combinations.

ANY PLUMBER CAN SUPPLY YOU.

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Largest Manufacturers of
Toilet Tanks and Seats in the World.

SPLINTERS AND SHAVINGS

Making "Pulp" Lumber.

(Contributed by M. T. Sharp, Wheeling, West Va., for Keith's Magazine.)



THE following is a formula for making what might be termed "pulp lumber," or pulp tile, but by whatever name called it is very easily made, is very inexpensive and very far-reaching in its utility, as it could be successfully made and used in most every home whether of the rich or poor.

"Seven pounds of dry sawdust to 100 pounds of unsanded gypsum stucco is the proportion," and that amount makes three square yards of lumber one inch thick. It can be made at a labor cost of three cents per square yard in ordinary wood moulds, having adjustable sides and ends and a rubber-covered bottom. By mixing a little stucco and sawdust and pouring into a cigar box and let it set the results will be surprising to people not familiar with the action of gypsum mortar—it sets very quick and when hard it can be sawed and can be nailed to wood studs and the material holds nails very well. For a real cheap wall it can be nailed on the wood studs and the joint filled with mortar and you have an air-tight vermin-proof wall, or give it a skim coat of plaster and you have it ready for papering. Cast this lumber two inches thick and set between two-inch wood studs and form a solid partition which when given a half inch of plaster on each side is far less expensive than either wood or metal lath plastered, and on account of the fibrous nature of the lumber is more sound-resisting than the hard plaster applied on wood or metal lath. This lumber can be used in most all places where expensive plaster-board would be acceptable and costs within the reach of the poorer classes, for they can make it. The test mentioned will surprise the party who makes it, on account of the strength of the tile and the ease with which it can be handled and worked.

Failures Among Building Contractors.

(From *The Building Age*.)

Some of the reasons which have been instrumental in causing recent failures in close sequence among building and engineering contractors of more or less prominence are set forth in a very interesting article in the *Record and Guide*, and from it we take the following:

The primary factors in the troubles of firms suffering business embarrassment at this time are three: First, failure on the part of those figuring jobs to discount the steadily rising prices of building materials; second, under-estimating, and, third, taking business beyond the capacity of their resources through the process of "bunching." An attempt has been made to attribute some of these failures to slowness of steel deliveries, but those who are in close touch with the credit market say that this factor, instead of being potent, is only mildly contributive.

Basic construction conditions are excellent. The real estate market is more active than it has been in almost six months. Building money is comparatively easy, especially for gilt-edged propositions; and the building material market is firm, with mill supplies conservatively low, prices stiffening, and the distributing market well stocked. Dodge reports show a healthy tone in the matter of prospective building operations throughout the entire metropolitan district, and architects as a rule report full boards. Such being the case, delay in deliveries of structural material, while possibly temporarily embarrassing to contracting firms by reason of withholding of process payments, should not precipitate a sound building firm. The real causes of failure, therefore, must be looked for elsewhere.

Competition among building contractors and engineering companies in recent years has been very keen. So many new concerns with limited resources have entered the building field that established houses have had to depend largely upon



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Solid Porcelain Compartments

which can be kept free of breeding places for the disease germs that poison food which in turn poisons people. *Not* cheap "bath-tub" porcelain-enamel, but one solid piece of snow-white unbreakable porcelain ware—nothing to crack, craze, chip, break or absorb moisture—but *genuine* porcelain, *over an inch thick*—as easily cleaned as a china bowl—every corner *rounded*—not a single crack, crevice, joint, screw-head or any other lodging place for dirt and the germs of disease and decay. Send at once for

FREE BOOK About Refrigerators

which explains all this and tells you how to materially reduce the high cost of living—how to have better, more nourishing food—how to keep food longer without spoiling—how to cut down ice bills—how to guard against sickness—doctor's bills.

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If you need one fixture only—or complete lighting equipment for your home, club, store or office—write today for our handsome new Portfolio of Selected Designs. It shows all that's best in modern lighting equipment—and the prices will open your eyes!

Shower fixture, complete, as illustrated, 5-light, \$5.25, 4-light, \$4.50, 3-light, \$3.75.

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Comfort and Privacy

The Burlington Venetian Blind

will shade your porch and enable you to make your porch a haven of rest and comfort on sizzling hot days.

With the Burlington Venetian Blind you will get the advantages of open air, and at the same time you will be secluded from the gaze of passers-by. It is easy to adjust the Burlington Venetian Blind to any angle. The top can be opened for light and ventilation and the lower part closed to keep out the sun.

Make your porch a cool place for entertaining or reading, and a pleasant place where the children can play—by using Burlington Venetian Blinds.

Write for illustrated booklet—it depicts and describes various styles

BURLINGTON VENETIAN BLIND COMPANY
335 Lake Street, Burlington, Vt.

old customers and upon their reputations for reliability for new contracts. The result has been a partial recognition, at least, of what has come to be the "unwritten law" among contractors.

The small contractor, pushed hard to keep enough business in hand to hold his organization together, is sometimes tempted to ape the big firms and "bunch" a number of operations simultaneously.

During the last two years common brick has moved up from \$5.75 a thousand, wholesale, to \$6.75 and \$7 (summer quotations). Portland cement two years ago this spring was as low as 70 cents a barrel, Lehigh Valley, while the prospects are that it will be considerably over a dollar a barrel before the spring building season actually starts. Structural steel, two years ago, was considered high at \$27, while today it is stiff at \$31. Lumber, in all departments, has advanced at least five per cent since 1909, and this week's reports show that practically all lines will move to even higher levels than have heretofore existed when the spring season opens. Stone, sand, roofing, equipment and labor all cost more today, and the increasing demand for fireproof construction only tends to make the cost of construction move higher.

In the face of this sharp rise in material prices, competition has been such as to force construction prices down, and the inevitable consequence has been smaller profits, if not actual losses.

The Percentage Contract.

Many people refrain from building homes because they have been told by their friends that it always costs more than they thought it was going to do. And then explanations of how much this "extra" cost, and how much more this involved than the original amount provided for, are forthcoming, with the result that the man who had notions of putting up a \$3,000 or \$4,000 residence decides to pay rent a while longer and not risk plunging in over his head.

This condition is remedied to a large extent by the percentage plan, for a limit is always fixed beyond which the builder may not go. And when there is added to this, as is frequently the case, a provision that the builder is to receive 50 per

cent. of the saving that is made on the original estimate, there is every incentive for him to reduce costs at every turn, and to put the building into the hands of the owner, complete, for less than had been expected, instead of more. This is the modern profit-sharing idea which has been found to work well in manufacturing and mercantile establishments, and there is no reason why it should not be a success in the construction field.

In the average dwelling proposition the contractor who takes a job at a low figure cannot help trying to increase his profits to normal by putting in the inevitable extras at a pretty high figure. This is what most owners object to; namely, that the bids are not a fair indication of what the house is going to cost. When the percentage system is used, extras go in at no higher figures than any other items, and the tendency of the builder, especially if he is on a basis similar to that outlined above, whereby he as well as the owner will profit through securing a saving in the cost of the job, will be to reduce the expense attached to these, instead of increasing it.

The system is eminently fair to the contractor, since it rids each job of the terrors attached to figuring an unusual or unknown quantity. In most cases, especially where a building something out of the ordinary is to be put up, and unusual conditions must be confronted, it is necessary that the contractor add a considerable factor of safety, in order to be sure of making a profit. But in a case where the business is handled on the percentage basis, the contractor need have no fear of losing all of his profits because the cost of handling a new proposition was greater than it was expected.—*The Building Age*.

A New Preservative.

Dr. Allan F. Odell, assistant professor of chemistry in the Louisiana State University, struck by the waste practiced by the enormous lumber camps of his section of the south, especially those that produce cypress lumber and shingles, started an investigation to see if some use might not be made of the sawdust. He had a theory that the quality in the wood that resists all rot influences might be extracted,

New Roofing Discovery

Works Wonders in Beautifying Home!



For Simplest and Grandest Homes

CCHARMING Moorish beauty and dignity of appearance of Metal Spanish Tile gives an air of distinction to the home graced by this wonderful new and practically indestructible roofing.

It has taken home builders of America by storm, for it is the modernization of the wonderfully beautiful roofs of historic Spanish edifices.

The art of making this roofing, left behind by fleeing Moors driven out of Spain centuries ago, until 1910 could not be made practical for the modern home, despite its alluring beauties.

After years of experiment, we have hit the solution. That is why today we are able to offer American homes the amazing attractiveness of

Metal Spanish Tile Roofing

Its scores of vital, practical advantages cost no more than common roofing, yet mean tremendous economy—it needs no repairs and outlasts several ordinary roofs because of its practically indestructible metal construction.

It is absolutely wind, weather, storm, fire and lightning proof.

Easy to apply. No soldering, no special tools—any ordinary mechanic can apply it. Interlocking system by which tiles dovetail into each other makes the roof absolutely water tight and provides for expansion and contraction perfectly—summer and winter. It is guaranteed non-breakable.

HOME-BUILDERS—Simply send us today the dimensions of your building and we will tell you by return mail exact cost of all material. Our new 1912 book on beautifying the modern American home by use of **Metal Spanish Tile** is yours for the asking. A postal will bring it. Address

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Now's the time to settle the furnace problem—to decide upon the heating equipment for your new home. You want a furnace that you can depend upon—one that will give you clean, healthful heat the year around at an economical cost. Pick the

XXth Century Furnace

40,000 families use this furnace—they know what real heating comfort is. And they are saving money every day because they are getting a third more heat at a third less cost.

XXth Century Furnaces have an exclusive side-burning fire pot and positive air feed—a pot that gives perfect and complete combustion and burns all kinds of fuel, even cheap grades of soft coal and slack. It consumes its own gases and smoke and does not throw off any fumes or soot. In short XXth Century Furnaces give you a well heated home without any of the trouble, expense or inconvenience of the ordinary furnace.

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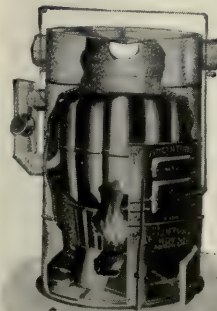
When you buy a XXth Century Furnace you are insured of perfect installation—our Engineering Department sees to that. And the service does not cost extra.

Write us today mentioning the number and size of rooms to be heated and we will tell you what style furnace you need and where you can get it on our Common Sense Guarantee. Ask for Booklet 46 on Home Heating.

**XXth Century
Heating
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Akron,

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There **LOTS OF PEOPLE** whose idea of a hot air are furnace is a collection of castings, roughly put together, in which fuel is burned, wastefully, which poisons and scorches the air, and which scatters dust and dirt all over the house, warming part of the house and leaving the rest cold.

We Make Furnaces —but not such furnaces as that. It is true that cast iron furnaces cannot be made with joints which will stay tight. They may be cemented when they are new, or the joints may be filled with sand, but cast iron warps and expands with heat and very soon the joints open up, and then comes the distribution of dust and gas, and then *all* kinds of furnaces are condemned because that kind of a furnace has proved unsatisfactory.

Our Furnace Is Different. The inner body of the heater is a big steel box, made up of large, annealed steel plates, and wherever these steel plates meet they are *welded* together, so that there is no seam or joint left, but the whole thing becomes like one piece of seamless metal.

In making up these furnaces the steel plates are clamped together and intense heat is applied where the edges of the plates meet, melting the steel like wax till the plates run together and become a continuous body. The weld thus made is strong and clean, *absolutely and permanently proof against leakage.* No amount of heating and expansion will ever open that seam again.

This welding costs more than riveting or cemented joints, but it is worth more, and it marks the difference between the usual type of furnaces and *our* kind. We guarantee our furnace absolutely against leakage at these welded joints as long as the furnace lasts.

We would like to send you a sample of two bits of steel welded together, showing just how this seam is made, then you will understand why our furnace never leaks.

We use steel because it heats up quicker, radiates faster, and is more economical in fuel than a cast iron furnace.

Now, while you think of it, won't you drop us a postal card, and let us send you this welded sample and also our booklet telling how houses may be successfully heated with furnaces, and how our plan of selling, direct from factory to consumer, will be an advantage to you.

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Makers also of White Steel Medicine Cabinets, and Family Dish Washing Machines.

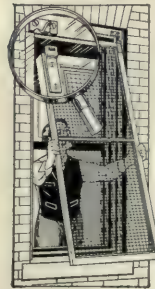
SPLINTERS AND SHAVINGS—Continued

if found, and used on other woods. After a series of experiments he succeeded in isolating an essential oil, new to science, which he named "Cypresene." It was new to science because no chemist had heretofore been able to extract it; perhaps none had tried to find it.

From 275 gallons of crude sawdust he extracted, by baking it in a great iron retort, 125 gallons of liquid distillate—a tarlike liquid obtained by distilling the gases and steam from the roasting sawdust. This liquid contained a number of chemical constituents, such as wood alcohol, creosote, and acids common to woods, and in addition was found the "Cypresene."

This will be good news to the world. For if the everlasting quality of cypress might be imparted to other woods many a problem will be solved. How to get fence posts that will last long enough to pay for the setting has troubled many a household. Concrete posts are not found to be a complete success, besides it is a week's job to take one up and remove it to another place. Unless absolutely right, they chip and scale, and they take unkindly to a nail. So with stable floors, plank is better, if the planks are of cypress or of any other wood that could be made as enduring as cypress by the infusion of the essential oil of this wonderful lumber.—*National Builder.*

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SIMPLE—strong—weather-proof—
—and absolutely "non-rattle."
Screens or storm sash easily hung or removed from inside. Hangers only, 10 cents. Hangers and Fasteners, 25 cents—at retail.

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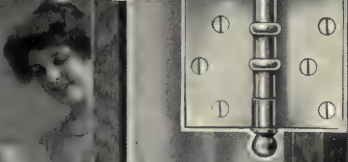


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in repairs such as attend slate and wood shingles. **The First Cost Ends Your Roof Outlay.** "Art-Kraft" roofs are easily laid, easier in fact than wood shingles, and are characterized by a handsome appearance and extremely low cost.

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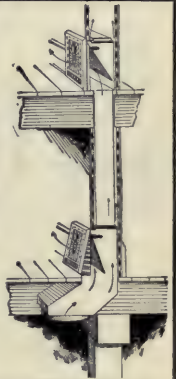
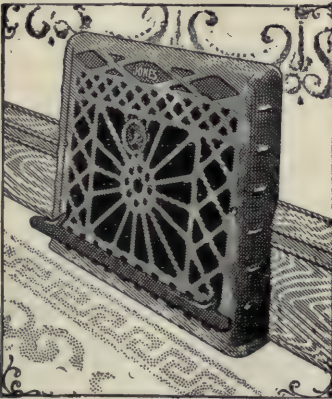
during the coldest weather may be secured by installing the "JONES" System of Heating, one principal of which is the heating of one room on two floors from the same basement pipe, insures not only a saving, but produces the results wanted.

Our improved "JONES" Side Wall Registers have been installed in over 350,000 of the most comfortably heated homes of the United States and Canada.

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New Booklets and Trade Notes



WE have been favored by the publishers, the Bobbs-Merrill Co., Indianapolis, Ind., with a copy in two large volumes of an important work just issued by them on "Workmen Compensation and Industrial Insurance." The author, James Harrington Boyd, A. M., Sc. D. (Princeton), and Chairman of the Ohio Employers' Liability Commission, is an authority whose name alone is a guarantee of the value of this work, which is the first complete presentation of a subject, vital alike to employers and employed. While Germany and England have adequate systems of compensation in actual operation, the U.

S. Government has in the last four years enacted laws with reference to Federal employes only, and a different and partial code obtains in some but not all of the state commonwealths.

Mr. Boyd's valuable and comprehensive work gives the full text of the statutes in force in Germany, England, and the several states who have enacted laws up to January 1, 1913. Most of these are modeled upon the plan of the German economists, but practical thinkers the world over are now earnestly considering these problems. Mr. Boyd's work is the result of many years of study and labor, two of these spent in Europe in investigation there, and is of the greatest value not only to the specialist in these subjects, but to the general employer and employee.

A Rich Water-proof Finish For Your Concrete Home

Don't simply paint or stain your cement or concrete buildings—waterproof and beautify them at the same time with

CHI-NAMEL CEMENTONE FINISHES

Costs no more than the make-shift way—and results are much better and more lasting.

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"The Finest Milled Flooring in the World"

One important feature is the **wedge shaped tongue and groove** which enters easily, drives up snug and insures a **perfect face** at all times **without after smoothing**, an advantage that is not obtained by any other manufacture.

Our method of air-seasoning and kiln drying has stood the test for thirty years.

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Gas to Light with.

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Gas for Laundry purposes:

Gas to heat water for the bath and other uses.

Gas to operate a gas engine for pumping and other purposes.

You can have all these conveniences cheaply and automatically by installing the

DETROIT Combination Gas Machine

FOR ILLUMINATING AND COOKING

Will not increase your insurance rates. On the market over 40 years. More than 15,000 in use in Residences, Stores, Factories, Churches, Schools, Colleges, Hospitals. It will Pay You to investigate. Write us today—NOW—a post-card.

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Attractive Proposition to Plumbers



Carburetor under ground

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"REPUTATION AND QUALITY COUNT"

feet wide. Furnished with round or square columns as shown in cut.

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Central Mantels

are distinctive in workmanship, style and finish and are made in all styles—Colonial to Mission. **Catalogue Free**—Will send our new 100-page catalogue free, to carpenters, builders and those building a home.

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BUY YOUR FURNACE \$10 DOWN \$10 A MONTH



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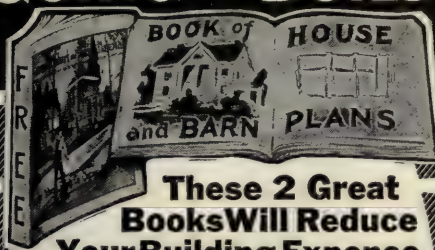


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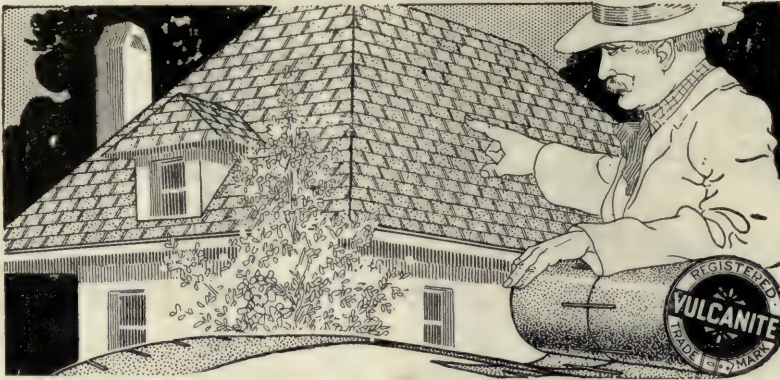
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THE EDITOR'S CORNER.

Our July Number.



WE KNOW our readers will agree with us that this issue of Keith's Magazine is packed full of good things. The illustrations are replete with suggestions for those who are building or contemplate building a summer cottage or a more permanent country home. Not only are the pictures of other country homes suggestive, but much definite information on the processes that go to make up the *tout ensemble* is found in the experiences we have gathered together, that will help to clarify the homebuilders' ideas.

The *Designs*, in that section of the magazine, have been selected with special reference to the country home idea.

We have known people who for months before they actually began to have plans drawn, made a study of the best publications on this subject, collected pictures, designs, building details which embodied their ideas or gave them new ones. They not only got a lot of pleasure out of doing the thing itself, but found it extremely useful, when sifted and boiled down, in clearing and defining their building ideas.

NEXT MONTH.

Our limited space would not accommodate all the features we had provided for the July number. So in August we will present those we had to leave out. Our August number will include photographs and description of a beautiful *Suburban Home* in Newton, Mass., with the unusual and charming detail of the entrance used as a frontispiece. Another article on *COTTAGES and SMALL DWELLINGS* will appear in this issue. A timely and instructive article on *SLEEPING PORCHES* will be helpful to many. Some attractive photographs will illustrate *PERGOLA EFFECTS* and the decorative topics will include an article on *PORCH FURNISHINGS*. The departments will contain detailed instructions for *LAYING and FINISHING of OAK FLOORS*, and on the use of *CASEMENT and FRENCH WINDOWS*, besides many things we cannot specify, but which make this section of the magazine so valuable to our readers.

KEITH'S MAGAZINE

ON HOME BUILDING

WITH WHICH IS CONSOLIDATED

THE JOURNAL OF MODERN CONSTRUCTION IDEAL HOMES MAGAZINE

M. L. KEITH, Publisher, 426 McKnight Building, Minneapolis, Minn.

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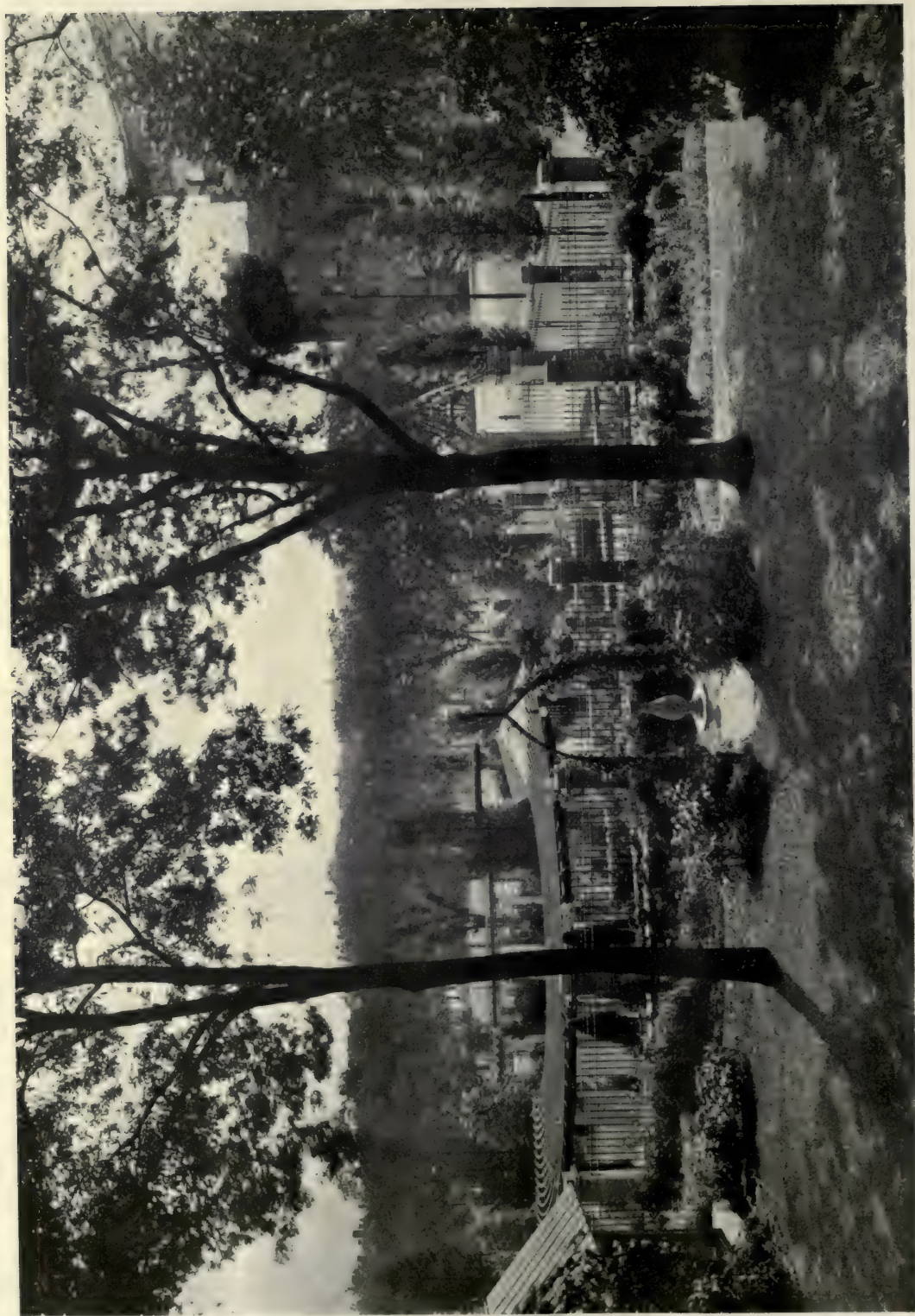
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THE "GARDEN BEAUTIFUL" IN MID-SUMMER.
(Grounds of E. G. Walton, Minneapolis, Minn. See page 8.)

KEITH'S MAGAZINE

VOL. XXX

JULY, 1913

No. 1



THE GARDEN VIEW OF "OVERLOOK."

"Overlook," a Country Home in Alabama

With Photographs from the Owner



HE old, southern plantation home, as it was "befo d' wah"—with its rambling white "galleries" and innumerable darkies "toting" everything, from pails of water to logs for the fireplace—is the picture that rises to our mental vision when we think of a southern country home.

The modern, perfectly equipped and charmingly appointed country home in one of the extreme southern states, shown in these photographs, comes to

most of us with a little feeling of surprise.

"Overlook" is the felicitous name of this beautiful place, the all-the-year-round country home of Col. E. L. Higdon, a few miles out of the prosperous city of Birmingham, Ala., and from its lofty elevation commands a magnificent view of the tall chimneys and lofty spires of the city, a thousand feet below.

The approach is by a private road, that leaves the main road some three miles out



THE HALL—FINISHED IN GENUINE MAHOGANY.

from the city, and winds up the mountain side between dogwood trees ravishing with their great creamy discs and dark cedars—a perfect foil. The road winds in graceful curves to the main entrance, broadening into a wide, sweeping drive circling velvet lawns set about with numerous ornamental concrete columns bearing acetylene lights which light up the grounds in brilliant fashion. The dwelling itself has a park-like setting of pine trees, with a structural beauty that is in complete accord with the setting. One of the cardinal laws of good architecture is to let the nature of the site and the local materials suggest the construction. The builders of this house have followed this principle and attained a delightful result. The exterior is largely

composed of the mountain rock and boulders, and the construction is massive, the first-story walls being two feet thick. The copings are of cut stone brought from Tennessee. The openings are unusually large and the heavy stone copings are supported by steel beams. The stone arch over the front entrance is massive, weighing several tons. The white stone and the remaining white trim relieve and enliven the grey stone and mountain-slate roof of greenish grey, whose color and texture merge so delightfully into the surrounding landscape.

The most complete modern equipment in heating, lighting and plumbing conveniences is installed. The house is heated by hot water, with concealed radiators. There are two bath rooms, luxuri-

ous and equipped with beautiful fixtures. These possess the unusual luxury of hot and cold soft water; the lavatories, laundry and kitchen sink having a like supply. Besides the soft water supply, which is taken from a thousand gallon cistern in the basement and operated by a hand pump in a separate smaller outfit, delicious cold spring water is carried all over

viting sign-post of "Rest-a-Bit," which meets traveler or guest with its friendly invitation half way up the hill.

This delightful country home is another instance of the keener interest and closer co-operation between owner and architect which is coming to characterize the building of country homes east, west, north and south. People are no longer



FIREPLACE OF KENTUCKY CUT STONE.

the house, thus affording a water supply more complete than is possible in the city, where there are no limpid mountain springs.

This luxurious water supply is made possible by installing a very complete water system, with a pump house and gasoline engine, at a mountain spring a couple of hundred feet distant and down the hill from the house

Another picturesque feature of the place is the rustic log cabin, with its in-

satisfied with uncomfortable and ugly farm houses or cooped-up cottages, sans comfort or charm, just for the sake of getting away from the city. Our country homes are steadily growing more in harmony with nature and more expressive of the owner's taste and architect's skill.

When to these are added the delights of pure, fresh air, wholesomeness and freedom without isolation or discomfort—who would not have a country home?



The Garden Beautiful

With Special Regard to Garden Borders for Country Homes

By Nell Ingram Walton

(See Frontispiece)



THE principle thing that impresses me in looking at western gardens is the lack of thought behind them.

Even in gardens planned by landscape gardeners of repute, there is generally a lack of intelligent imagining of the picture the garden is to make when it has fulfilled its promise. A person must have some preconceived notion of what result is desired when the garden is started. Now a garden is not merely an adjunct to a house; it is part of the house itself—it is the out-door house, and should be architecturally as much a part of the home-picture as the porches, the out-buildings or any other feature of the place. I do not at all like the idea of relegating "the garden" to a space in the rear, fenced off from the grounds proper. It should be an integral part of the grounds. Even the vegetable garden can be so placed and planted and partially concealed by flowers and shrubs, that it becomes not only an interesting, but a charming part, of the Garden Beautiful.

Unless the house is too stately in architecture, I like it smothered in vines and flowers. If it is too formal for that, then let your garden lead from it naturally and interestingly and let the picture of house and garden be connected by plantings of hardy plants, shrubbery and trees.

Make borders of nearly all the boundaries of your place. Make them of either shrubs or flowers—both, if the size of your place warrants it; that is, if you can

safely plant the flowers in front of the shrubbery.

In planting flower-borders, it is necessary to remember to have a foreground as well as a background. Nearly all landscape gardeners impress the need of a background of green, a wall or a vine-covered fence, to show off, to the best advantage, the gay flower colors; but not all of them remember that a green foreground of smoothly shaven grass is quite as necessary to the picture. A bit of accentuation is needed also, like the touch of black, the French always use, to enhance their gowns of color. This note of accentuation or strength can be supplied in various ways: a pointed tree of box in an ornamental tub, a sun dial, a bit of marble or a rustic seat may be the point of interest, but it must not be overdone. In a not too large city garden, I have in mind, there are nearly a dozen Italian jardinières, each planted exactly alike. One or two of them would make a lively note of color in an otherwise almost entirely green garden,—but a dozen!

A border can be composed of almost any combination of plants that one selects, but experience has proved, to me at least, that only perennials should be planted together for the best results. A border should be beautiful from the time the first early spring flowers appear until it reaches a climax of bloom and color, just before the frost cuts it down. With annuals in the border, there is usually a wait of bare ground in the spring, when

the seeds are sown, and also an uncertainty as to their position in the picture when they come up. There is one exception in annuals, which I use with no sparing hand, not only in perennial borders, but elsewhere in the garden; amongst the shrubbery, in out of the way corners and wherever nothing else will grow. This is the annual Larkspur. It

and durability. It is sixty feet long and lies straight against a background of vine-covered fence. Its back is to the east, which is important, for each plant grows straight toward the rising sun, as plants do, and toward the fence. Consequently each row of plants becomes in turn, a support for the row in front of it and thus, in the front row of the border



THE BORDER—WITH RUSTIC BASKET HEAPED WITH ROSE COLORED PETUNIAS IN FOREGROUND.

comes in white and various shades of pinks and blues and violet. It self-sows to such an extent that once established in your garden it is as perennial as a dandelion. The little plants can be most safely transplanted.

My own pet perennial border I have evolved after years of elimination, for we gardeners are generally too greedy and want too many of the good things of the garden catalogue.

This border has evolved from several standpoints: of constant bloom, of harmony of color and size, and of hardiness

there is no sprawling or lopping. The outer line of the border is in deeply irregular curves and at its widest parts the border is ten feet, at its narrowest, perhaps only four or five.

The plants nearest the fence are a tall soldierly row of hollyhocks, at their best several feet high. In front of these are planted the equally tall feathery foliages *Bottonia Latisquima*, alternated at intervals by clumps of *Bocconia* and the blue English *Delphinium*. In front of these a thick row of *Pyrethrum Uglinosum* (Giant Daisies) and then another straight

thick row of Michaelmas Daisies (Hardy Asters) in their several varieties of white, lavender and purple. Then, following the outer curves, instead of straight rows, is the phlox, shading from pure white through all the varieties of rose and lavender. In the spaces left between their curved row and the straight line are planted Oriental Poppies, *Hesperis Maternalis* (Dame's Heliotrope) and Garden Heliotrope. In front of the phlox is a

are softened, and accentuated at the same time, by the feathery white masses near them, of the Garden Heliotrope. Hardly have the poppies disappeared when the single pyretheums in front are nodding their many daisy-like flowers to the breezes in all shades, from white to rose. The Sweet Williams and the Dame's Heliotrope join the party and the Hollyhocks at the back have taken up the same color notes; emphasized by fascinating



"THE CLOISTERS"—WITH GREEN FOREGROUND OF SMOOTHLY SHAVEN GRASS.

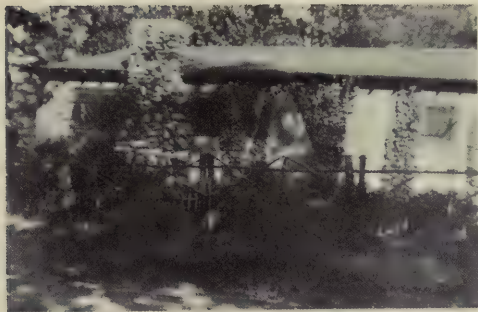
curved row of Sweet William, then Shasta daisies and as an outer edging are the Hybrid Single Pyrethum.

After this border starts blooming it never ceases to have color and interest, until, at the end of summer, it is a glory, a perfect picture of white and blue and rose, the tints melting into each other in a fascinating way. Moreover, the border, beautiful always, never looks the same a week at a time. You will note that there are no reds or yellows in this border, except the scarlet flames of the Oriental poppies, which are the first thing to shoot forth in the spring. These

bits of skyblue, contributed by the Delphiniums. In quick succession come the Shasta Daisies and the glories of the Phlox. By close care in keeping each plant well-groomed and free from forming one seed-pod, nearly all your spring and summer flowers will still be blooming when the Giant Daisies, the Hardy Asters and the *Bottonia Latisquima* burst into a grand finale of snowdrift bloom that lasts until frost.

There are other borders of yellow perennials shading from the palest cream to the deepest orange; and mixed borders of reds and blues, and of purples and white.

New Bungalows in the Land of Bungalows



Made from An Old Steamboat.



THE California architects continue to rack their brains for novelties in the bungalow line. Since the first importation of this type of dwelling a dozen years ago, it has increased by leaps and bounds, till now these bungalows cover the face of the

earth—at least the Pacific coast country—in fact, one is reminded of a swarm of great, brown locusts settled down upon the land, in riding through some sections. so closely do they hug the ground and so thickly are they set.

The forms of the bungalow are legion. There is the Mission style,—generally built around three sides of a court or patio; the Italian villa style of cream or delicately tinted plaster; the Moorish type with arched openings; the mountain log cabin built on bungalow lines, with puncheon floors and home-made furniture; but most numerous of all are the bungalows built of shingles or shakes, with wide eaves, casement windows, board roof with projecting rafters, and



(1) IN WHICH INTEREST IS GIVEN BY SLANTING LINES.



(2) UNIQUE BALUSTRADE WITH PIERCED OPENINGS IN CONCRETE BLOCK.

usually some sort of rough chimney, cobbles or rough stone or clinker brick. This is the popular bungalow, because of its picturesqueness and low cost. Even quite "classy" architects put forth their efforts on these lowly but by no means humble

dwellings, and are strong in their combinations, of shingles and boulder, or tile or lichen covered rock, or brick with wide joints; generally there is a touch of concrete, both smooth and pebble-dash—and jutting timbers wherever they can be



(3) IRRESISTABLE COMBINATION OF ROUGH CLINKER BRICK AND SHINGLES.

made to jut. In fact, a wise architect is as necessary to this class of dwelling as any other, if one would avoid sensational features and a general air of higgledy-pigglediness in the unrestrained use of too many kinds of material.

Probably the bungalow will be more than ever "the thing," since even the dowager queen of England, Alexandra, has been captivated by the "hominess" of beauty of the bungalow type of house

Much built-in furniture, of the wood used for the trim, makes for compactness and convenience as well. The irregular outlines of the bungalow afford many nooks and corners which are thus utilized for cupboards, the dining room buffet, sometimes a built-in bed. The arrangement of the rooms usually gives an effect of space one would not expect in a small cottage. Often the living room extends across the entire front and one end of it



(4) EFFECTIVE USE OF PLANTING AND SETTING.

and has built one for her own use. To be sure it looks more like a little parish church, with its high, steep roof; it is indeed a cottage, but the queen likes to call it a bungalow, and it is literally covered with ivy which, of course, enhances its charm. It is built of wood too, which is the true bungalow spirit.

Craftsman ideas prevail in the finish of the interior woodwork and the furnishing is correspondingly plain, though by no means cheap or common. The simplest of finish is used on the interior wood work, which is straight lines and guiltless of moldings.

is devoted to dining room use, the division indicated by an arch. The kitchen is always small and lined with cupboards, so as to eliminate the pantry and save steps.

All of the bungalows shown in this group have their exteriors treated with stain, which blend in agreeably with the rough surfaces of the clinker brick or contrast effectively with the smooth white plaster. In bungalow No. 1 interest is given by the simple device of a slanting line on the corners and angles and this slant is carried out in the window and door framing. Bungalow No. 2 has a pierced balustrade surrounding the



BUNGALOW OF QUEEN ALEXANDRIA AT SNETTISHAM, ENGLAND.

open terraces which is a decidedly novel method of using concrete block. The solid stone corners and foundation and the copings of plain, smooth concrete contribute to a handsome effect. The happy union of rough clinker brick inset with boulders, and the feathery grace of vines and flowers are details which give a unique charm to bungalow No. 3, while the setting of trees, together with the broad and handsome approach and the

effective use of box in stone pots give distinction to No. 4.

These interesting and livable dwellings go far to refute the claim put forward in some quarters that wood and shingle construction is a thing of the past. But the picturesqueness of wood and shingle will always be a potent charm, uniting as they do with other materials to make combinations irresistible to the artist and delightful to the architect.



GARAGE FOR BUNGALOW DWELLING, DESIGNED ON SYMPATHETIC LINES.

Bungalow and Cottage Furniture



THE display of bungalow and cottage or country house furniture this season is extremely fascinating. Of course the several varieties of willow and wicker furniture go without saying; there is no end to their shapes, stains and upholstering. The furnishing stores have provided car loads of wicker in anticipation of the demand, and even now are short on some lines.

Foremost among these are the new effects in silver grey cottage bungalow furniture, in craftsmanlike lines, specially adapted to bungalows and cottages. Our illustration shows a number of pieces of this furniture, together with a Scotch rug in harmony with the furniture and wall hangings. The latter is 9x12 in size, with a greenish grey center and a border in dull greens, old reds and blues. Price,



Courtesy J. W. Thomas & Co.

THE NEW SILVER GRAY FINISH IN BUNGALOW AND COTTAGE FURNITURE.

One cannot wonder; it is so comparatively inexpensive, the shapes are graceful, they are comfortable, they are light and easy to carry around, and last, but not least, one carries out such fetching color schemes by means of the stains and upholstery.

For bed rooms, or the sun parlor, or the cottage parlor, it is par excellence—the choice.

There are, however, other situations than these, and for these there have appeared in this season's offerings some new ideas in bungalow and country house furniture with which our readers may not be as familiar as with the willow varieties.

\$37.50. The wall paper is a light grey textile effect, and the cretonne draperies displayed are all new patterns, to be used in connection with the furniture to soften the plainness of the wood. Some of the pieces shown have cane panels, and some are upholstered in a striped green and white ticking, which is very much the thing just now. The price of the large chair with curving back and upholstered seat, is \$19.50. The one with both seat and back upholstered is \$19.00. The rocker with antique cane back is \$24.50. The sofa is \$25.00. The table \$25.50. These are a new and beautiful shade of grey, with a satin smooth finish. We



Painted Ivory with Stencil Decoration.

have also seen similar pieces by another manufacturer almost equally desirable and quite a little cheaper.

With the growth of a taste for the simple and the good in architecture, people are reverting to the best forms of earlier days in furniture.

Painted furniture is nothing new. The Dutch took up painted furniture in 1750 in a very elaborate way. Because of the large demand dealers bought up old sleighs and utilized the beautiful panels found in them for fine cabinet work.

Heppelwhite and Sheraton, while not exactly copying this style, painted good motifs on certain parts of their furniture.

There are factories now which make a specialty of bed room suites upon which are stenciled beautiful designs. Chairs are constructed with broad splates to give space for this style of decoration.

The patterns shown here are exact copies of decorations on two very old chairs and they can be used to good advantage on the front of an old style bureau as well as on a chair back.

The smaller designs could be used on

the rungs of the chairs and also on narrow spaces on almost any kind of furniture.

This branch of decoration is bound to grow and be popular, as one can carry out an artistic color scheme in this way. If people have good taste and are willing to take the time—can, by following these directions, make an old bed room suite a thing of beauty.

Sandpaper off all the old varnish until the wood is smooth and free from the gloss of the old finish. After this is done, give it two coats of white lead, mixed rather thin with linseed oil, and a small amount of drier. When the first coat is thoroughly dry, sandpaper it smooth before the next coat is applied. Sandpaper again until perfectly smooth. This preparation is necessary to insure a good foundation.

Then put on a third coat and when dry rub it down, but instead of sandpaper, this time use pumice stone mixed with oil to the consistency of thick cream. Rub with a soft piece of felt thoroughly saturated with this mixture.

Take plenty of time as the success of what follows depends on having the surface perfectly smooth. When smooth give it two coats and then follow with a coat of enamel.



Buffet Serving Table in Old Hickory.



Courtesy J. W. Thomas & Co.

IVORY ENAMELED FURNITURE FOR THE COUNTRY HOUSE.

Take a stiff brush and rub the paint toward the center of each open space in the pattern, being careful not to have the paint so thin as to run under the pattern. Remove the stencil quickly so that it will not drag or rub, then with a tiny brush touch this up in free hand. This makes a beautiful, finished piece of work.

Gray-blue and white is suggested for the furniture of a delft room. The furniture may be painted white with the stencil decoration in blue. Painted walls and woodwork complete a harmonious scheme.

A delicate flesh or ivory color may be used for the furniture in sleeping rooms, while beautiful chintz is used for draperies. The walls and wood trim should also be painted in tones harmonizing with these fabrics and with soft colors in floor coverings, you have an up-to-date room.

Another popular color scheme for the furniture is a pinkish mauve. With this the walls and woodwork should be in soft cream with only a little decoration in stenciling under the picture rail.

Specimens of old rush bottomed chairs with decorated backs are treasured high-

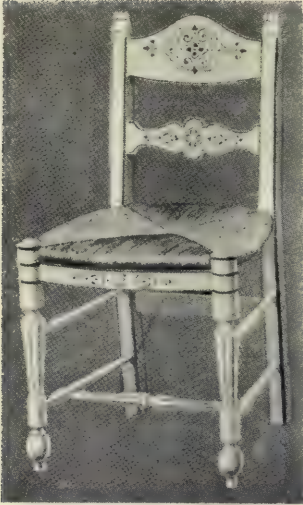
ly as being the relic of some grand-dame of revolutionary times.

Should any desire something more elaborate, and with a very perfect finish, the ivory white enamel furniture illustrated will satisfy the most exacting and fastidious. Indeed, nothing finer or



Ivory Enamel and Cretonne.

—From the "Dutch Boy Painter."



A Quaint Rush Bottomed Chair Tastefully Decorated by Means of Stencils.

daintier in bed room furnishing for the sleeping room can be devised. The chaste and delicate decoration, the cane paneling, the dainty cretonne upholstering, form an irresistible combination.

The toilet accessories covered in cretonne are charming details of the furnishing. The background shown for this furniture is a foliage paper in all-over delicate greys with touches of color in pastel shades of rose and blue.

Impromptu Furnishings for the Cottage

Perhaps some one may be helped by the recital of make-shifts in the way of furnishings which the writer has seen in various summer houses. One spends so little time indoors in the mountains or at the sea that a general effect of comfort and convenience is all that need be sought. The judicious use of paint and stain does wonders for all sorts of oddments.

A very long kitchen table did duty in one house as a sideboard of a long living room. Two shelves of nine-inch boards, as long as itself were bracketed to the wall above it and two wide boards fitted together made an under-shelf, supported by library shelf pegs driven into the legs of the table. Table and shelves were

painted bright black, blue plates and jugs were ranged on the shelves and the table top covered with a cloth of Russia crash with decorative embroidery in dark blue. The dining table was very original, an L made by setting a long table and a short one, both of the ordinary kitchen sort, at right angles. A crash runner like that on the sideboard was laid across the base of the L and another with its length. With common kitchen chairs painted black, a really charming dining room was achieved at small cost.

A pew from a dismantled village church, with its number and book rack removed, its ends, back and seat covered with green colonial denim, and stained green, made an excellent davenport for a country living room. Another pew had its back taken out and was painted in a good shade of French gray. A narrow strip of steel bed spring was fastened securely to either end of the seat, the seat board cut away below it. With a pad made from an old comforter and a cretonne cover for the seat and a couple of pillows one of the bed rooms was supplied with a comfortable couch, which could be used for a child's bed on occasion.

For another bed room a couch was improvised from a home-made hammock. Barrel staves enameled white were used for the spreaders, the ropes were white cotton clothes line, dyed green, and the body of the hammock white sail cloth with a stenciled pattern in green. Each bed room had in one of its windows a drop shelf to be used for a writing desk.

One of the old-fashioned clothes horses in three divisions, was taken apart, and each section used for a screen across a corner, to conceal a bedroom washstand. The wood was enameled and a width of cretonne attached to the top bar, falling to the floor. Small brass hooks attached to the back of the middle bars were useful for a variety of things.

A Convenient Summer Cottage

By Arthur E. Gleed



IN a summer cottage we do not look for all the conveniences of a town house, for our principal desire is to reduce house work to a minimum. In many cases conditions that would be considered unendurable in

same time sufficiently simple to make the daily round of house work only a matter of an hour or two.

The cottage illustrated is designed to this end. Its main apartment is a spacious living room, two sides of which can



A SUMMER COTTAGE, SIMPLE BUT COZY.

town are looked upon as a mere joke when time is given over almost entirely to the pleasure of outdoor life. On a vacation most people would prefer a cottage of rural simplicity to a house of many rooms that required a large amount of indoor work to keep it in order. The ideal arrangement is a cottage that will allow ample room for comfortable sleeping purposes, with a living room that is large and airy for meals, yet is at the

be partitioned off as bed alcoves by means of sliding doors. Most of the inconvenience of an alcove bed room is caused by lack of privacy for dressing purposes during the day when the alcove is open to the adjoining room. In the present instance this is entirely obviated by the small dressing rooms opening from the alcoves. These dressing rooms are fitted with simple washing conveniences and an ample supply of clothes hangers



VIEW OF LIVING ROOM WITH GLIMPSE INTO DRESSING ROOM.

and hooks, that all operations appertaining to a change of dress could be performed at any time with comfortable privacy. The alcoves would then be left free from any appearance of a bed room, and when furnished with couch beds would be a pleasant addition to the living room. Slide doors are used between the alcoves and the dressing rooms, they being neater and more handy where space is limited. Fittings can be obtained for these doors, having rubber wheels, by means of which they run silently and easily.

The living room has an open fireplace at one end, the recess at one side of it opening to the kitchen, and that on the other side being filled by a built-in sideboard. The addition of a fireplace to the summer cottage is well worth considering, for wood can often be obtained for the trouble of gathering it, and on chilly evenings, a cheerful blaze and the win-

dows open to the fresh country air is a combination that is at once hygienic and pleasant.

The construction and finish of the building would be largely a matter of taste, and would also depend upon the amount of money to be laid out. A pleasing exterior finish would be a shingled roof stained olive green, with the walls of shingles stained a medium brown and relieved by white trimming. In the sketch of the elevation it will be noticed that the windows are placed somewhat high up from the floor. This leaves the wall space free for such low furniture as couch beds and also adds to the privacy of the rooms.

The front door is worthy of notice as it is considerably wider than is usual in a building of this size, the idea being to give ample fresh air in the living room. The door itself is fitted with glass in the upper panel and is supplemented by



screen doors opening from the center. These screens, and also those at the windows, are made in square lattice form to match the lattice of the porch, and when all are painted white will add a distinctly decorative feature to the exterior.

The interior finish could be of ordinary lath and plaster for the walls with pine for the standing woodwork, but the use of pulp board for such a building as this is strongly recommended. The ease with which it can be applied, and its portability in comparison with plaster materials, are advantages which make it an ideal finish for a summer cottage.

A pleasing color scheme for the living room would be shades of tan for the walls with the woodwork stained brown, these being relieved by touches of dull blue and green in the curtains, cushions, etc. In the illustration the walls are divided by a molding placed about five feet from the floor. The upper part and the ceiling are kalsomined a pale buff color, and the lower part, which receives all the wear, is finished in flat oil paint of a rich tan shade. As a slight relief to the upper part of the walls, a simple stencil design could be applied at the corners

and over the openings to the alcoves. This design should be in tones almost the same as the wall, that it may not stand out too plainly. The fireplace is of tan colored brick, with a heavy oak shelf, supported by black iron brackets. Suitable curtain material would be tan linen or denim, embroidered along the bottom edge with a simple design in shades of gold, dull blue and green. The couch beds offer a good opportunity to support the color scheme, as they can be upholstered or covered in artistic shades of tan and dull blue. Cushions could also repeat these colors in bold simple designs, executed in stencilling or embroidery, fine finish not being so much expected as a certain rural effect, suggestive of the peasant arts.

The built-in sideboard can be made quite a decorative feature if it exposes to view some well chosen china. Here again delicacy is not looked for, and an inexpensive willow pattern in a dull blue will harmonize perfectly with the tan and brown of the walls. Add to this a yellow Dutch bowl for fruit, a vase or two of green or blue earthenware for flowers, and a few odd copper candlesticks, and the result will be orderly and pleasing without any great outlay.

Time spent in a summer cottage has the advantage of teaching us the simple life, for until we try we never understand how many things we can really do without. The living room in this instance should be made a place for experiment in simplicity, and if it contains only those things really used every day, and if they are chosen for their useful, beautiful shapes and good coloring, it will be found that they give more pleasure than the merely ornamental. By this means the housekeeping will be reduced to a minimum, leaving leisure hours for the enjoyment of the outdoor world, which after all, is the object of building a summer cottage.



Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

--John Evelyn, 17th Century.

Attracting Birds to the Country Place

By Horace W. O'Connor

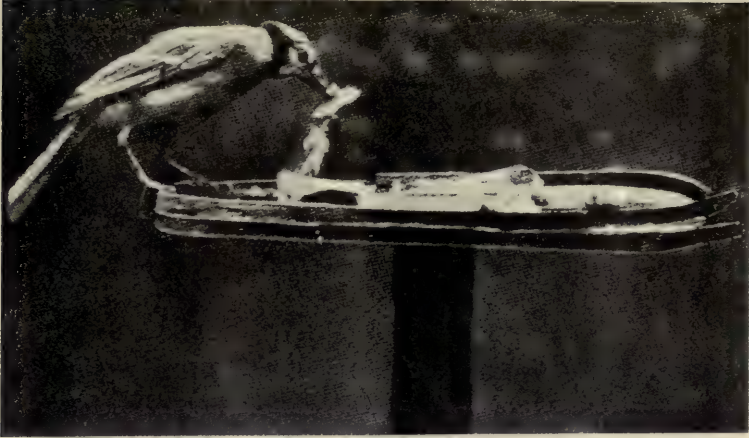


THE matter of attracting birds to your yard is all very simple, particularly if you happen to have an old grape-arbor, a bit of shrubbery, or a tree or two. Of

course, they won't come without encouragement. It may be, even, that you will have to give up your old cat, but you will soon find the sacrifice amply repaid. For to the heart of a little bird, a cat is the very embodiment of prowling destruction. Then you must have a feeding-board, on which to spread such dainties as bits of boiled potato, sodden bread (in summer), cracked corn, rice, crushed nuts of various kinds, trimmings from meat, and suet. For birds soon grow to love the hands that feed them.

A very good free-lunch counter for the birds can be made from the lid of a cheese-box, which any "reputable grocer" will be glad to give you. The rim should be pared down to about the width of an inch, so that the smaller birds, such as chickadees, juncos, tufted titmice, and the various members of the sparrow family, will not be too much hidden from view. The lid should then be nailed securely to the top of a stout stake driven well into the ground; the stake itself should be long enough to bring the feeding-board well within the line of vision from your favorite window.

Another good device is to have a wide board fastened to the window-sill. In some respects this is preferable to the other, especially in winter, for then the birds are brought so close that one can watch their every movement, see all their markings distinctly, learn their preferences in the matter of food, and become

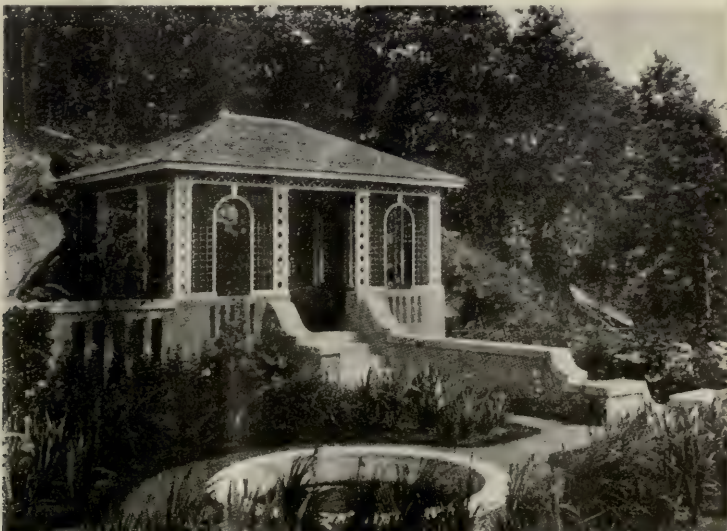


BLUEJAY CARRYING OFF A LARGE PIECE OF FAT AND BREAD.

familiar with the temperamental characteristics both of the individual and the tribe. A narrow strip of wood—a piece of lath will do—nailed around the edges of the board will keep the food from being kicked on to the ground when the heavier birds, such as the blue jay, the clumsy hairy woodpecker, and the flicker come to dine.

Of course, no bird-hotel of the first class is complete without facilities for bathing; hence, if you wish to attract the elite of bird society to your yard, be sure to provide a bath—to keep a shallow pan

filled with clean water, on your lawn. A brick laid close to the edge, so that the birds can have easy access to the bath, will be an addition to their comfort. If there is danger from cats, however, set the pan on the feed-board, or on some other inaccessible point; for birds know very well that when their feathers are all wet they are at a disadvantage, should the need for sudden flight appear. I know of nothing that will bring more joy to the heart of bird-lovers than the sight of a catbird, a robin, or even a jay, splashing the water with its wings, “ducking



BATHING POOL OF CONCRETE FOR BIRDS.

under," and manifesting all the delight that a small boy does down at the old swimming hole.

For the birds that creep and climb, for the downy woodpecker, the flicker, the hairy woodpecker, and the little brown creeper, all of which stay with us during the winter, fat meat or suet is best. This should be fastened to a pole out of the reach of hungry cats and dogs, or to the limb of a tree. Of course, other birds will be attracted by this, even when there is plenty of food on the board. The bril-

Sun shone brightly most of the day. Early in morning; trees covered with ice.

Chickadees, cardinals, tufted titmice, fox sparrows, juncos, flicker, hairy woodpeckers, downy woodpeckers, brown creepers, robins, grackles, towhees, blue jays, mourning doves, a crow, and, up in the old oak at the foot of the garden, a sparrow hawk (eating a junco!).

Some of my friends have asked me what is the best time to begin attracting the birds. Invariably I answer that, like the day of salvation, now is the accepted



FEMALE BALTIMORE ORIOLE AND ENGLISH SPARROW LUNCHING TOGETHER.

liant cardinal, the brown thrasher, the grackle, the robin, and many others, in their season, will enjoy sampling it, provided they can find a foothold. For the birds that love to scratch among the dead leaves, the fox-sparrow, the towhee, the junco, the white-throated sparrow, and, with his bill, the brown thrasher, bird seed, or finely ground chicken feed, should be scattered on the ground in a warm, sunny place.

In our own back yard, on the twenty-second of March, this year, the record was as follows:

Temperature, 16° at 7 a. m.

time. Begin this morning, this afternoon, this evening; at any rate, some time today. It may be that your first efforts will be greeted with joy only by a ragamuffin band of English sparrows; but don't despair. If there is a bird of any other species within a mile, a bird that is not naturally retiring, like the water thrush, for example, it will soon find the board and come regularly to dine. Once let this be the case, and you will never lack company or entertainment; for birds are the minstrels of old; they repay with lilting song and heartening chatter the kindness of those who give them cheer.

Country Homes Here and There

THE American country home is ubiquitous and ranges from the Gulf to the Maine coast. If one were to find any drawback to this pleasing fashion, it would be in the migratory habits of living which it breeds.

In Minneapolis, for instance, a city noted for its beautiful homes, the people

the year, and either travel or board in town in midwinter.

The country home of Mr. O. P. Briggs, Minneapolis, is an instance of this. Though unpretentious, it has an air of comfort.

The house is located a mile and a quarter from Excelsior, and a half mile from Manitou Junction. It is thoroughly built



COUNTRY HOME OF MR. O. P. BRIGGS AT MINNETONKA.

live in them for so small a portion of the year it scarce seems worth while to have them. What with a winter home in Florida or California, and a summer home at Minnetonka or some other of the thousand sparkling water gems, or mayhap in the New Hampshire hills—the town home is closed for the greater part of the year. However, as this applies only to the wealthy class, we need not perhaps be much concerned.

These pictures illustrate the country homes of those who live in them most of

for both summer and winter.

It contains on the first story a living room, 18x36, a hall 16x16, a dining room 16x16, and den 13x18, all finished in selected quarter sawed white oak, including the floors. All but the den are beam ceiled. The kitchen and pantry are finished in hard wood. It has an ice chest, four apartments, which holds a ton of ice.

The second story consists of six sleeping rooms, with hall. Five of these sleeping rooms front three ways, making al-

most an outdoor proposition in the summer.

There are three porches, one 36x11, one 28x10, and one about 10 feet square.

The house is heated with hot water, and has three bathrooms, also three large grates.

The living room, 18x36, has a large open fireplace at one end, built of cobble-

convenience, while the grounds are marvels of beautiful landscape effects. One picture shows the old-fashioned well-curb of native rock, so charmingly and sympathetically treated, even to the wooden spout and the moss-covered log trough. Its background of vine-hung lattice and the low, vine-covered cottage walls of the rear are a perfect setting.



LIVING ROOM IN THE BRIGGS COUNTRY HOME.

stones and selected brick, taking a four-foot stick of wood. It is lighted by electricity by an independent plant, with storage battery. The light is as fine as can be found in the city.

The house is surrounded by an orchard with about 150 trees, apple and plum, all of which are in good bearing condition.

"Old Orchard" is another Minnetonka country place, the home for the greater part of the year of J. F. Wilcox, Minneapolis. The rambling, old-fashioned house is fitted up with every comfort and

In somewhat the same spirit, but far removed by the map, is Orchard Place, a country home in Goshen, Ind., built in the bungalow style for \$1,500, the result as the owner says, of taking Keith's Magazine. An old apple orchard is the delightful setting of this attractive country home which is so in tune, both as regards its exterior construction and its interior arrangements, with the simplified country life which its owner desired, and with its surroundings. Here, too, we have the rock-bound well, as a feature of the grounds, though with a different treat-



OLD-FASHIONED WELL CURB AT "OLD ORCHARD."

ment, and doubtless "the moss-covered bucket that hangs in the well" is dangling from the rafters.

The porches and verandas, pergolas and sleeping balconies, which are distinc-

tive features of the American country home, are quite lacking in the English country house, which is either a grand affair of stone or brick arches or a thatched-roof cottage. Our warm summers



PICTURESQUE FEATURE IN WELL CURB AT ORCHARD PLACE, GOSHEN, INDIANA.



RUSTIC GARDEN POOL AT ORCHARD PLACE.

make our porches an imperative need, and a distinctive characteristic. Also we differ from our English cousins in the far simpler and more compact and convenient arrangements of our interiors, especially of the service portions of the house—the halls, pantries and kitchen. The out-door

screened-in dining room is another feature that is fast coming to be generally adopted and planned for, and every year our country homes are growing more harmonious with their surroundings and more satisfying in their adaptation to the needs of country life.



OLD SPANISH ADOBE BUNGALOW.

A Log Chalet in the Canadian Rockies

By John M. Bulkley

THE building of an artistic log cabin in the Canadian far-west, such as is shown in the pages of our magazine, is something of an event, in view of the fact that material suitable for such a building is so scarce,

berta, the rugged and romantic scenery is suggested in the picture—suggested only—for camera, canvas and artist are inadequate to reproduce the grandeur of the snow-capped mountains, the invigorating atmosphere, the unmatched blue



A LOG CABIN IN THE CANADIAN ROCKIES, AT EXSHAW, BOW RIVER VALLEY, ALBERTA, CANADA.

and that the process of building is very slow, makes it about as expensive as would be the case if its erection were in the vicinity of Bronx Park in the borough of Manhattan, New York, and possibly more so; yet the delightful setting for the house, its unusual and appealing environments fully justify the lover of the wild and beautiful in making this selection. This in the Bow Valley of Al-

berta, the rugged and romantic scenery is suggested in the picture—suggested only—for camera, canvas and artist are inadequate to reproduce the grandeur of the snow-capped mountains, the invigorating atmosphere, the unmatched blue of the skies, or the inspiring majesty of height and breadth of everything—nor must we forget the luxuriant profusion of flowers which good dame Nature has everywhere scattered for the delectation of her admirers. The foregoing, however, do not constitute all the reasons for the presence of the primitive chalet in the Bow Valley.

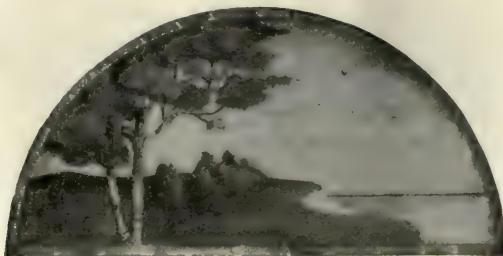
The splendid, almost magical growth



EXSHAW, ALBERTA, CANADA (IN THE BOW RIVER VALLEY.)

and development of the great outdoors of northwestern Canada has demanded buildings and material for a thousand uses on every hand, and the logical selection of cement as the best and most permanent material, admitting too, of such a variety of treatment in concrete structure that the Canada Cement Company were forced, almost, to employ the natural resources of the place, abounding in material from which cement is made, to erect an enormous plant, which at once placed Exshaw on the map, and converted this beautiful spot into a bustling

little town, with its railroad shipments running into incredible figures. There must be houses for the operatives and a hotel for transients, and a home for the manager and superintendent; hence the little chalet at the base of the mountains; for the superintendent wisely decided, that since a house must be built—why not have something "unique"? And this will be a feature of the landscape when the little hamlet and the town shall have outgrown its swaddling clothes, and concrete palaces surround its flower-grown grass plot.



A Mountain Camp in the Adirondacks



IN the heart of the Adirondack wilderness, a mountain lodge is located, which for picturesque and unique construction, as well as elaborate interior comfort, is probably unsurpassed anywhere in the country.

and comfort. In the first place, great roaring fires in many fireplaces are supplemented by open stoves. In the next place the walls of the house are 14 inches in thickness, with a construction of whole logs on the outside, which is ceiled by



THE BIG CHIMNEY—A CORNER OF THE CAMP.

Kamp Kill Kare is the fitting and appropriate name given to this unique example of a country home, and the spirit of the name is carried into all the living of the occupants.

Though primarily intended for summer residence the camp is kept in living order all through the year, as it is the custom of the owner to entertain parties of friends here all through the year. Although an unplastered log house would hardly seem adapted to house parties in 20 below zero weather, there is no lack of cheer

half logs on the inside with the flat surface exposed and the "chinks" between filled by a layer of cork—an excellent non-conductor of temperatures.

The main camp building is more than three hundred feet long, but so broken in outline that it does not convey the impression of great magnitude. Only a portion of this main building is here shown, as it is chiefly interesting to the general reader for purposes of suggestion for a rustic lodge on a smaller scale. The picture gives a view of one corner



MAIN ENTRANCE TO THE LOG CABIN.

of the building, and of one of the big stone chimneys.

The building is nowhere over one and a half stories in height, and therefore covers a large ground area, a policy in con-

struction which has added greatly to its interest, thought of course increasing expense. The dining room for instance, is at one end of the long structure, with views on three sides from the windows.



RUSTIC BRIDGE TO ISLAND IN LAKE KORA.

The kitchen, with its accompanying noise and odors, is semi-detached. The sleeping rooms are at the opposite end.

A water system at the camp provides for all domestic uses and several bathrooms, but gas is a city luxury which is not permitted. All the lighting is by lamps and lanterns, in the good old fash-

These are re-inforced by the iron lanterns hanging on each side, with the black "growler" or guard.

There are several smaller, detached structures which form part of the whole scheme. One of these—the boat house—is here shown, as nothing more attractive by way of a model for a small cottage



THE BOAT HOUSE AT "KAMP KILL KARE."

ioned way. The center "chandeliers" are formed of crossed logs, with oil lamps set at the ends, and the whole camp is full of architectural conceits which are in harmony with the general design.

The entrance to the main cabin is an extremely interesting example of rustic design, with its door from one immense solid slab divided in the center and equipped with iron knocker and latch.

on rustic lines, could be imagined than this boat house. The latticed windows and the shingle roof give just enough smoothing down to the rough slabs and sawn log ends.

The picture of the rustic bridge leading from the camp to an island in the lake on whose shores the camp is placed, gives a hint of the nature beauties which are the environment of Kamp Kill Kare.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 432 KEITH'S ARCHITECTURAL SERVICE, Minneapolis

B 433 BUNGALOWCRAFT CO., Los Angeles, Cal.

B 434 E. B. RUST, Los Angeles, Calif.

Design No.

B 435 JOHN HENRY NEWSON, Cleveland, Ohio

B 436 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 437 W. S. BESSELL, Hackensack, N. J.

Design B 432.



RECENTLY designed for Southern California. Exterior composition is of rough-cast white cement over frame construction. Plans call for a small basement under the rear portion, with heating plant and laundry. The floor plan shows rooms very large and airy. Note the large living room 18x28, with pergola on the end. The sleeping porch over first story chamber is spacious and airy; a real family sleeping porch. A bath room is provided for each floor, and a third could be placed between the two side chambers. Hardwood floors throughout the whole house. Oak finish in all principal rooms on the first floor, balance in pine or birch, or white enamel with birch doors stained, if preferred. The main stair is set back of the great living room in a wide stair hall, a style which gives an effect of stateliness, and is economical of space. Estimated cost, \$12,500 to \$14,000.

Design B 433.

The bungalow here illustrated is a good example of a well balanced use of cobble stones and shingles, and the result is an artistic, attractive house which should be built in almost any part of the country at a cost of \$2,800. Exclusive of heating and plumbing.

The house has a frontage of 34 feet, just right for a 50-foot lot, and will look well on either a level or an elevated location. Of course, vines and plants will enhance its beauty.

Entering from a broad porch one stops

a moment to admire the quaint oak front door with its glass panes. The living room is large, with a cozy front nook. It has an oak floor, beamed ceilings and a broad comfortable looking fireplace and mantel, located where it will best warm the house, and make an attractive showing from the living room and dining room.

The dining room is large, with oak paneled wainscot and built-in buffet; it opens from the living room through a wide but-tressed opening with drop beam. The breakfast room opens out on the back porch, and is a convenient feature which is rapidly growing in favor. Of course, if necessary, this could be used as a bedroom instead. The bathroom is well arranged to open from the two bedrooms, as well as from a small hall. The front bedroom has a large wardrobe closet, which the illustration does not show, and there is a fine linen closet opening from the hall. The kitchen is built in full cabinet style, with closets, cupboards, bins, etc., and there are stationary washtubs on the screen porch.

Of course, the painting, etc., is a matter of individual taste, but we would suggest a dark gray stain for the singles and dark red trimming and moss green roof. The inside walls are finished in hardwall plaster, with carpet float finish, tinted, with the exception of the bathroom and kitchen in which the walls below the chair rail are finished smooth, marked off to imitate tiling and enameled white.

If boulders cannot conveniently be had,



Keith's Architectural Service.

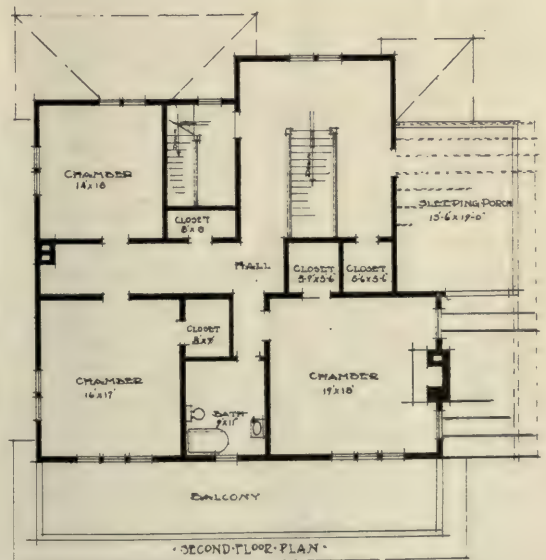
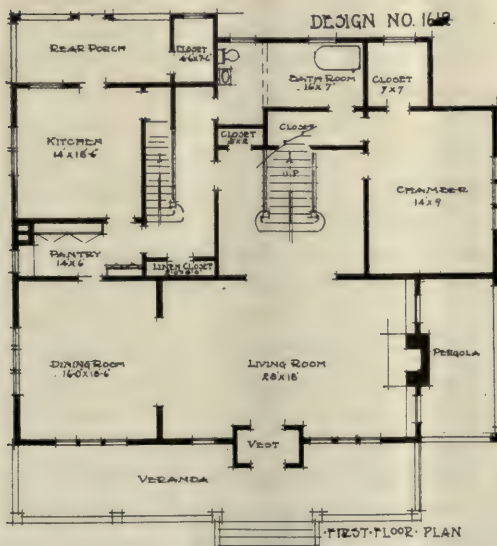
DESIGN B 432

A California Seashore Home

this house can be worked up beautifully in brick (preferably in rough clinker brick.) The cobble stones are pointed, with dark red cement mortar, and the porch floor and steps are also of dark red cement.

Design B 434.

A very attractive cottage design is here



shown at a cost of about \$4,500. At the first glance one is not aware of the extent of the dwelling, as the photograph, taken squarely in front, does not show the large area of the dwelling. The cottage occupies a ground space of 34x45 feet, exclusive of porches, and that is quite a house. The living and dining rooms are generous, and extend across the entire front. In the living room is a wide, colonial fireplace, red brick and white mantel, all the interior woodwork having a white enamel finish. The front of the upper floor is given up to storage under the wide, slanting roof, but there is a unique arrangement of the other half in two large sleeping porches, with a toilet between, which are beautifully ceiled and finished, and are practically bedrooms open on two sides. Closets are attached to these outdoor sleeping rooms, and a separate inner dressing room is provided. There is an excellent basement, with cement floor.

The treatment of the pergola porch in front is very happy, as also is the entrance feature. The house is set low to the ground in the fashion of the time. A novel feature of the interior design is a plaster hood built-in with wall and ceiling over the kitchen gas range. All the detail is carried out in an artistic manner.

Design B 435.

This house has the appearance of being larger than it is, on account of the long, sloping roof over the side porch. It is not an expensive house, though the cost, of course, will depend on the quality of materials and the more or less elaborations of details. It could be built for \$5,000, or it could cost \$3,000 more.

The ground floor space, exclusive of porches, is 38x38 feet. As shown here, the first story is dark red brick, with cream plaster on second story, and half-timber work in brown wood. A slate roof would look well, or a roof of shingle could be used, or one of tile.

The second floor is reached by a wide,

open stairway, and there is a rear stair from the kitchen. There are attic stairs and two rooms finished there, besides storage. The usual heating and plumbing are included in the cost estimate.

Design B 436.

The bungalow design illustrated in this issue has some of the characteristic features of the California bungalow, with thorough, good construction, and in every way suited to a northern home, as described, but at less expense can be built and finished for a warm climate or for a summer home.

The width is 43 feet, exclusive of the piazza, which extends to the right 10 feet beyond the line of house, with entrance steps to the side. The depth is 27 feet. Boulder stones are used with good effect under the piazza piers, and around the front foundation. It is designed to shingle the outside walls, staining the shingles brown, and leaving all of the casings, cornices, etc., rough and stained. The sash to the windows would look very pretty painted white, and a red stain on the roof will give a very handsome effect. There are five rooms on the first floor; the living room in the central front is 20 feet wide by 14 feet in depth, with a broad fireplace and stairs at one side leading to second floor. The two bed rooms are on the right, the dining room on the left, with connection through the pantry to the kitchen. Basement stairs underneath the main stairs. The arrangement is convenient, and will make a pleasant, well liked home. The second floor has three good bedrooms and bathroom. The hallway being lighted with dormer windows on each side of the front chimney, which shows on the outside above the roof, and is faced with boulder stone.

It is designed to plaster the interior and finish with Washington fir, woodwork stained, with natural oak floors, a good basement under the entire bungalow. The estimated cost, exclusive of heating



Bungalowcraft Co., Architects.

DESIGN B 433

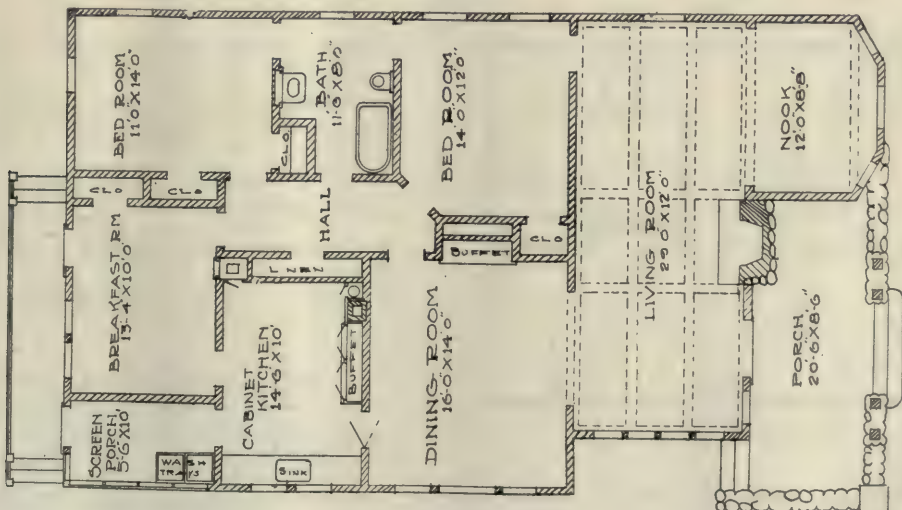
A Good Combination of Boulders and Shingles at Moderate Cost

and plumbing, is \$5,200. There is one main central chimney with flue for fireplace, and a second flue for furnace, kitchen and laundry.

Design B 437.

This design is equally appropriate for a home in the city or for a country house. It would be most effective in a group of

trees with hills in the background, such an environment as is found in the eastern states. The design is one submitted in the Brickbuilders' Contest, and is built of hollow tile, coated with cement. The living room, 14x28, opens upon a tiled porch through French windows, with a generous fireplace at one end. It is sep-





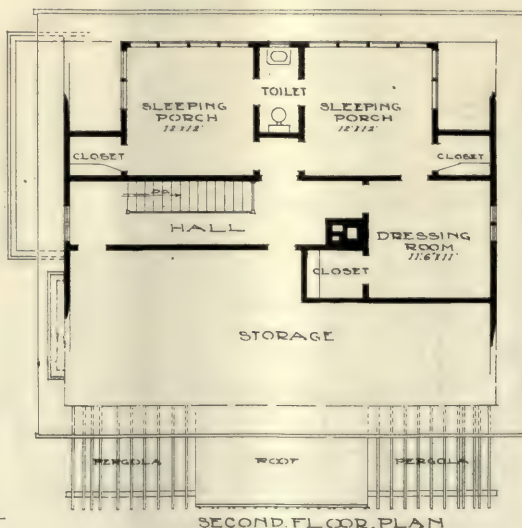
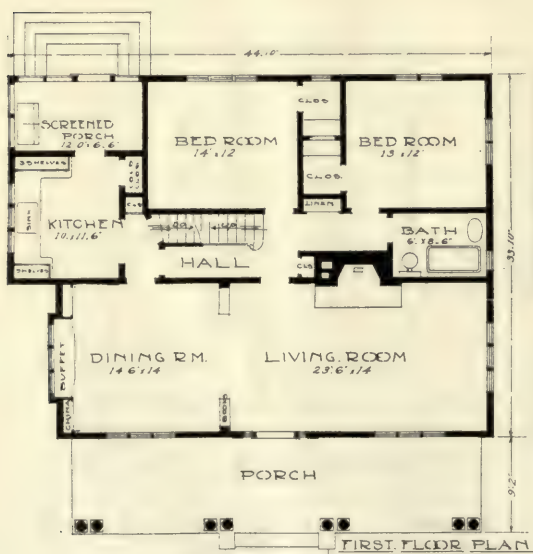
E. B. Rust, Architect.

DESIGN B 434

An Attractive Cottage in Pasadena, Calif.

parated from a nearly square dining room by a central hall. The interior wood finish is in fumed oak. The roof is covered by gray-green tiles; the shutters are painted green. The detail of the entrance is shown and is simple, but effective.

The main stair is recessed back in an economical way, but with excellent effect, and the service portion of the house is isolated at one side. The competition called for a cost limit of \$6,000, and this to include hot water heat and the best of plumbing.

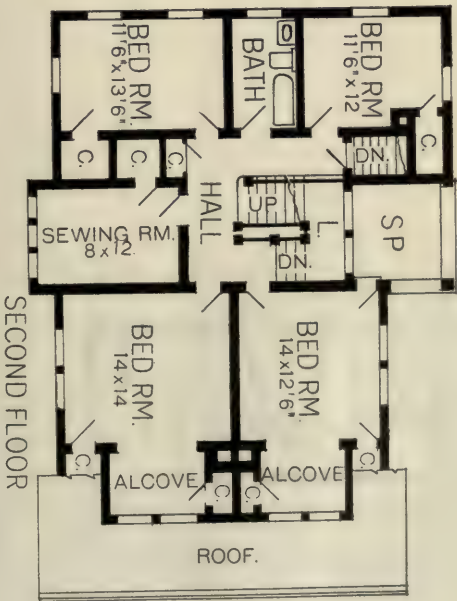
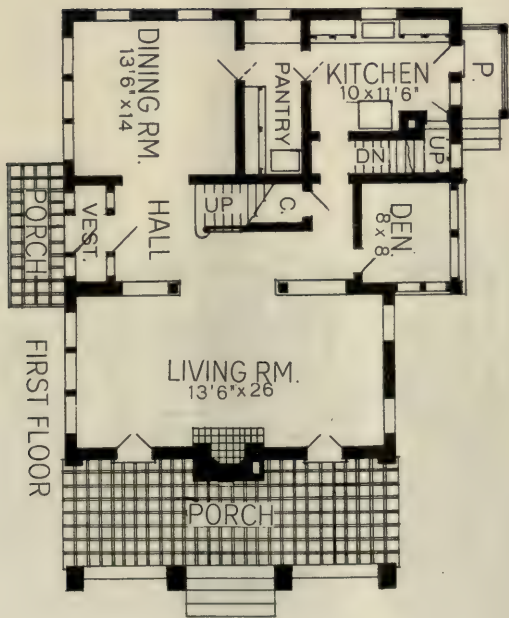




John Henry Newson, Architect.

DESIGN B 435

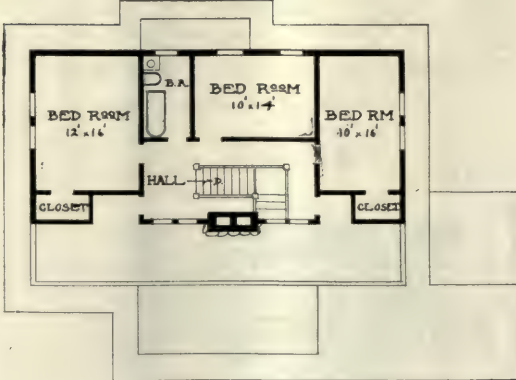
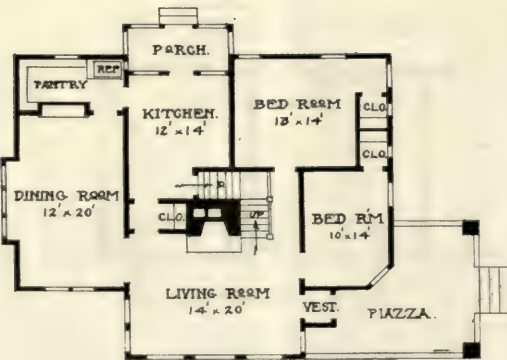
An English Brick and Half Timber House





DESIGN B 436

A Good Design for a Summer Home



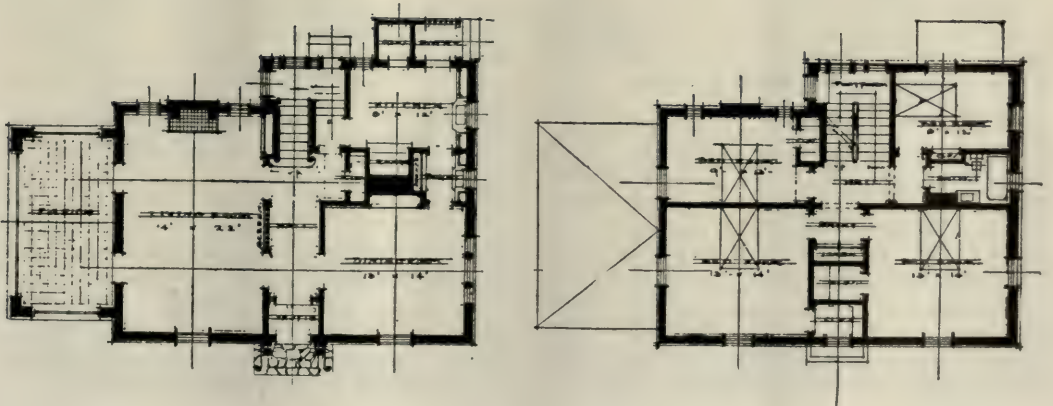


W. S. Bessell, Architect.

Courtesy of Nat'l Fireproofing Co.

DESIGN B 437

A Good Design in Natco Hollow Tile





Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

The Hall in the Colonial House.



T seems as if many of the modern colonial houses missed their opportunity when they cut off the rear end of the hall by a door. There was no feature of the older houses of this type more charming than the long hall, as wide as a room, with its uninterrupted progress from the porch to the garden. Its advantage was sanitary as well as decorative. The average country house a hundred years old is musty in the extreme, its rooms permeated by an odor of decaying animal matter, mould and dust. The exception is found in houses with a long hall opening from front to rear, often on both stories, from which a strong current of pure air ascends to the upper rooms.

A long hall of this sort, with its staircase set well back, a tapestry or landscape paper on the walls, above a three foot paneling, a long sofa of the Davenport order, with a mirror hung above it, and high backed chairs and a table or two at regular intervals, is a charming place and worth all the foyer halls in existence, while the circulation of air, from both doors, with cross currents from the side rooms, makes it delightfully cool in summer evenings.

Planning the Dining Room.

In many houses the rooms seem very poorly adapted for their special use. You see bedrooms where the proper placing of a bed is almost impossible, or where the person standing before the mirror receives almost no light, living rooms so broken by doors and windows that there is no room for bookcases or cabinets, dining rooms in which there is barely room to pass around the table. But in building a house for one's self one ought to

plan out the rooms with reference to the furniture. Specially is this care needed in the dining room, whose proportions must depend upon the sort of table to be used. Only the very large dining room should ever be square, and then only when a round table is used. With an oblong room the possible extension of the table must be made the basis of calculations. To get the proper dimensions, seven feet should be added to the width and the extreme length of the table, and a sufficient additional space allowed for the placing of the sideboard, serving table and china closet. When, as in many of the newer houses, these latter are made a part of the structure of the room, it is possible to get on with less floor space.

The Lighting of the Dining Room.

It is always difficult to plan the arrangement of windows in the dining room so that someone shall not have the light full in his face. One way of avoiding this condition is to light the room from the corners, say with windows in either end of the two long sides of the room. Then the sideboard and serving table can be placed at the ends of the room, which need be only the width of the table, with the necessary space for passing around it. It is one of the contradictions of language that a sideboard looks best at the end of the room.

The Colonial "Beaufet."

One of the interesting features of the colonial dining room was the beaufet, or as the ignorant called it, "the bowfat." This was a corner cupboard with arched glass doors and some carving above them. Frequently two of them flanked the fireplace, at one end of the long din-

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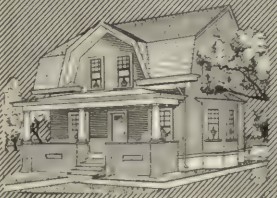
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ing room. The lower part of these closets had solid doors, behind which liquors were kept, while the glass doors enclosed the fine "chaney." In the modern adaptation, fireplace and cupboards are at one end of the room, with a bow window at the other, making the shape of the room a long octagon. These beaufets were by means an American fashion, and one sees them in the Georgian interiors of Dendy Saddler.

A Colonial Adventure.

A modern house in one of the smaller New England cities rejoices in a dining room of the type just described, as well as a wainscoted parlor with a garlanded wooden frieze. The builder of the house possessed, a great-great-uncle, who had at one time lived in a house of some pretensions in the Fort Hill part of Boston. Having a little leisure before taking a train at the South Station it occurred to him to look up the house of his long dead relation, now sunk to the status of a tenement house. In the dirty and squalid hallway, shining like a jewel in the mire, was a stair rail of exquisite detail and beautiful proportions, practically entire, though the treads were in desperate condition. The visitor let his train depart while he sought the Irish landlord and bargained for the stair rail. To make a long story short a plain wooden staircase took the place of the antique, the stair rail was set up in the new house, with new mahogany treads under a triple arched window, and the best part of it was that the landlord thought he had met Providence in disguise, and got the best of the bargain.

The Console in the Dining Room.

The console, or bracketed shelf, is sometimes substituted for the sideboard in panelled dining rooms with good effect, as the panelling makes a capital background for the silver displayed. The shelf is as long as an ordinary sideboard but rather narrower and the heavy brackets correspond to the architectural style of the other woodwork. In one house where this use was made of the console, the panelling above it was higher than elsewhere and surmounted by a narrow bracketed shelf holding some large pieces

of china. A smaller console can be placed elsewhere in the room to answer the purpose of a serving table.

Different Levels in One Room.

One of the difficulties often encountered in adapting an old house to modern uses is the extreme height of the windows from the floor. Why not get rid of this objectionable height, not by an expensive cutting down of the windows, often spoiling their proportions, but by raising the window end of the room a foot? The expense need not be great and the effect is excellent, especially in a bedroom, when it is desirable to use part of it for a sitting room.

Another thing which adds interest to a commonplace room is the French fashion of a platform for the bed. Many people dislike a very low bedstead and when one must be used the platform makes the situation more tolerable.

Living Up to One's Possessions.

There is an old story, probably by Harriet Martineau, of a family who inherited a silver pitcher, and were gradually led into ruinous extravagance in their efforts to conform their style of living to the standard set by the silver pitcher. Many of us have silver pitchers in the shape of some pieces of furniture much finer than the rest of our possessions, which are constantly crying out to us to give them a fitting association. Our one antique looks horribly lonesome, to say nothing of its being entirely out of harmony with our modern oak. Yet economy and good sense alike forbid a substitution.

When one has only one or two good antiques, why not isolate them? Take the secretaries, which our grandfathers considered essential. You may have an alcove or a recess leading from a larger room, possibly a small room at the end of a hall. Install the secretary there, supply it with a rush bottomed chair, lay down a small rug, hang two or three prints and dub the collection the writing room. A recent writer on interior decoration advances the idea that a desk of any sort is too intimate a possession for the public rooms of the house, that its place is in a small study or in my lady's

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boudoir. Or does my lady have a boudoir nowadays? If she does she can have nothing more charming at which to write than one of these old secretaries, with its book shelves behind glass doors, its writing space with many compartments and its three or four roomy drawers. A striped wall paper, a couch and a big chair, possibly a screen, all covered with a flowery, old time cretonne, and you have a delightful little retreat, a great improvement on one's bedroom as an upstairs sitting room. Here may be placed to advantage the tea table which has retired from the drawing room, a pretty article of furniture which deserved a better fate.

One Mahogany Bureau.

Probably it is the sort which had four deep drawers and no attached mirror? The mirror swinging between standards is comparatively modern. It is easy to supply it with a mirror, wide and low in a plain mahogany frame. You will find such mirrors in second hand shops of very humble pretensions, only needing to have their thick coat of varnish worked off, and their marred glass replaced. But do not make the mistake of fitting an old mirror with beveled plate. Plate glass, if you will, but our ancestors never saw a beveled mirror. Use your bureau in a room with a single bed and have that simplest form of iron bedstead whose head and foot are merely curved pieces of iron. You can buy directly from the factory, in the natural wood, a swing top light stand and Windsor chairs. Finish

them in brilliant black. You will want some small rag rugs, braided or woven, and it is possible to get rag carpet in the old fashioned colorings, gray and black, with dashes of red and blue.

For the walls of such a room nothing is better than gray distemper with a nose-gay paper border carried around the ceiling line, down the corners and above the surbase. Hang short demi-curtains at the windows, making them with a valance and edging them with a tasselled fringe, and if you want to use cretonne, select one of the block printed designs, in a small pattern, with the white ground covered with tiny black dots.

In making use of single pieces of old furniture, we must look for our inspiration to the houses of people of moderate means. Not everyone in colonial times had handsome furniture. The few pieces of mahogany were pieced out with painted wood chairs and tables, and supernaturally ugly some of them were, while rag and husk mats were common. But the people who had Chippendale and Sheraton did not use rag carpets, and in the modern house they are not in keeping with really fine antiques. A great deal of so-called colonial furnishings is extremely incongruous. Something more than a fancy for old things and the sentiment of association is needed. A few hours' intelligent study of the books of colonial interiors, to be found in any library, or of one of the old houses which have been preserved by the pious care of the antiquarian societies, is a necessity for everyone who desires to furnish in this style, or to place antiques in a proper environment.

The Needs of the Gray House.

I hope the gray is that of silvery weatherbeaten shingles, not of paint. Does sunlight strike across the piazza? If it does, we will run no risks but fill our porch boxes with geraniums and revel in the brilliant red of Turkey red twill cushions. Some of our furniture will be bright black, some of it silver gray wicker. Then to vary the Turkey red we will have a tablecover of Java print in bright reds and blues, of Austrian cotton in red and white, or even of Scotch gingham in a bandanna plaid.



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and old methods prevented us from getting as good pumping machinery for our customers as we knew they were entitled to.

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ANSWERS TO QUESTIONS ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

A Semi-Bungalow Interior.

A. L. "I have always been very much interested in your articles on interior decoration and as we are just completing a new home of semi-bungalow style, I would like a few suggestions as to the interior decoration. The hall is finished in oak, and is connected with the living room with glass French doors. For this floor I have some small oriental rugs. In the living room which has mahogany woodwork and furniture, I have two nine by twelve foot Hartford Saxony rugs, the colors being a dark blue and a little darker than the rose shade mixed, in a very pretty design. Then the dining room, mahogany woodwork and furniture, is also connected with the living room with glass doors, has three beams in the ceiling. For this room I will have to buy a rug. In the living room we have the indirect lighting, the center fixtures being a bowl of Flemish gold with side fixtures to match, one on either side of the mantle. The dining room has the semi-indirect with cameo bowl and side fixtures to match it. Now I would like suggestions as to wall decoration, curtains and hangings. I would like the living room, dining room and hall, in as near the same color scheme as possible, yet I had hoped to keep the dining room in blue, as that is my favorite color for that room, and I thought I would like a plain blue rug, yet my idea was to have those rooms harmonious as near as possible. As we are young married people, we would like to decorate with as little expense as possible, yet we want everything in good taste."

Ans.: Your floor plan shows an extremely good and well considered house and your information is quite complete with the exception of the exposure, which you omit to state. We will, however,

make suggestions in accordance with your preference for blue in the dining room, in the hope that the exposures are suited to this scheme. We are very much in sympathy with your idea of a unified color scheme through the rooms and your furnishings as described seem well adapted to this idea.

Beginning with the dining room, we think your plan of the plain blue Saxony here, is good. There is a very beautiful foliage tapestry in a design of horse chestnut leaves in rich blues, with the nuts and burrs in browns on a grey ground. This we would use as a deep frieze on a wall of putty grey, rough surfaced, textile effect, with curtains of Sundour in a lighter shade of the dull blue.

The French doors could have the same material run on small rods with rings, to permit of being drawn aside or veiled at will. The blue and rose of the living room should have a wall background of soft, mottled greys, repeating the blue in some of the furniture coverings and in side draperies over lace or scrim curtains. As the house is in semi-bungalow style, we would suggest adding one or two wicker chairs stained grey, upholstering them in a very beautiful imported cretonne in shades of old blue on a grey ground with slight touch of rose. This cretonne is 50 in. wide and costing \$3.50 a yard, is no more expensive than any good furniture covering and equally durable. It will give an air of distinction to your house; we should use half a width on each outer side of the group of three windows.

Something depends on your fireplace facings which you do not state. We would continue the color scheme into the hall with a small, conventionalized tapestry design in blue and rose and grey,



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a very refined and beautiful wall hanging. This paper need not be carried farther than the top of the stairs, finishing with a small moulding and doing the upper hall in a cheaper paper. All the ceilings should be tinted a light soft shade of grey. We would use the same fumed oak finish in the hall as in the den. On the walls of the den we would use a Tiffany blend in shades of tan and brown, with curtains of golden brown Sundour.

Scheme of Decoration.

E. S. "Am very much interested in your magazine and find you are helping others, so want to ask you to help me.

"Am having a new red brick house built in the country, four and a half miles from a town, on a good pike, on a very high place.

"Will have lights, water and furnace. Thought I would have the hall, living room and dining room in white with mahogany doors, and have painted walls.

"Suggest anything if you think better, etc."

Ans.—You have some fine rooms and we like your plan for a country house of white woodwork on the main floor. We like the mahogany doors also, but in that case you are almost compelled to the use of some pieces of mahogany in the living room, nor can we see your objection to it in the hall. The living room, being in the country, would be appropriately and delightfully furnished, in the main, with the wicker furniture now so fashionable, supplemented by a few pieces, such as a library table, in dark, dull finish mahogany. If you prefer dark oak for these pieces, then the doors could be given a walnut stain, which is equally good with a white trim, but in either case we should advise mostly wicker furniture for the living room. This could be given a light mahogany stain, or a light brown, according as you decide on doors and other furniture. Walls painted a soft, cool grey, with white ceiling, would be agreeable in this southwest room, with grey brick for fireplace.

We would use rich blue rugs, plain center—Shawmut rugs—on the floor, and upholster the willow chairs in cre-

tonne. There is an English print in lovely blues on a light grey ground, \$3.50 a yard, 50 inches wide, that we are now using in a house treated on these lines. It is used for the seat and back of a willow davenport, which is placed in front of the fireplace with its back against the library table. The davenport is nearly six feet long, two feet four inches wide, and costs \$30.00, without staining or cushions. With this is used a willow fireside chair, a couple of smaller ones, and a round wicker table, all done in the cretonne, except one chair, in plain blue velvet, the color of the rug.

We do not care for rough plaster in such a house, and it eats up paint fearfully. You can use painted walls mostly, but you can get very much better effects by combination in some places with paper. For instance, in the hall we would use a small figured blue and rose tapestry paper up as high as tops of doors, and paint the balance of wall and ceiling, also rear hall. This would open delightfully from the rich blues of living room.

If your red rug is a suitable size, it could be used in the dining room, if the walls are painted ivory, except a center panel all round the room, four feet wide, of paper, a beautiful English chintz design of birds of paradise and bright blossoms on an ivory ground. There is enough red in the flowers to countenance the rug, but not enough to clash with mahogany furniture. This is the way we have just solved a similar problem for a lady with a red rug, living in Louisiana, to whom we are sending all the rugs and draperies, and much furniture, for her new house. There is a cretonne made to match this paper to use at the windows, and the whole effect is very beautiful.

The little breakfast room beyond should have a paper of gay little nose-gays on a light ground.

By all means finish the second floor rooms in white or cream, according to the furniture and wall paper decided on. Most of these rooms you can tint or paint, using some of the lovely paper borders to decorate, and break the plain effect. The northeast room we would paper.

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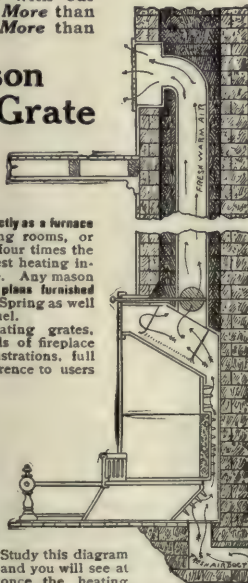
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ANSWERS TO QUESTIONS—Continued

Bungalow Ideas.

F. W.—“I am enclosing plan of living room and dining room of our bungalow which is being built. Appreciating your admirable taste in color schemes and decorations, I am writing you for advice. Kindly suggest both for these two rooms. The furniture I have for living room is old-fashioned walnut set, two fat chairs (comfortable) and quaint settee. You know the style. The rest is mahogany. I had thought of getting Circassian walnut for my dining room, but am open to suggestions. These two rooms are to be beamed. The finish to be the native lumber (fir) excepting floors, which will be maple. Walnut set to be upholstered. Rugs new, excepting two dull orientals, one 6x8, one 3x5.”

Ans.—In regard to suggestions for your room, we should be inclined to consider the walnut furniture rather than the mahogany pieces in deciding the stain for the woodwork, especially as Circassian walnut is to be used in the dining room. The brown tone is also more in harmony with a bungalow interior. We would suggest Early English as the stain for the fir in these rooms with the dull finish.

If you wish to tint the walls, then a soft pale ecru is advised for both rooms, with deep cream ceilings. If a hang is to be used, a delightful bungalow wall in harmony with your furnishing would be the new Shadow-Ko-na just on the market. This hangs just like paper and has a bronze effect running through it which lights up and gives life, but is quiet and refined. The brown of this goods is about like the light parts of Circassian walnut. Another equally pleasing and less expensive hanging would be a paper in the Tiffany blend of browns. We would suggest doing over the walnut pieces, in an

English tapestry, small figures in browns. In fact, we would keep this room in browns and creams with touches of soft rose red in cushions of fireplace seats, pillows, hangings of small windows, etc.

We advise Shawmutt rugs in three shades of brown, using one 9x10 in the main part of the room, with a 3x6 size in front of hearth. The rose red orientals we would place in dining room. The smaller one in the bay, the casement windows and French doors to be veiled with cream colored filet lace in a block design.

A Seaside Home.

W. W.—“Will you please send me some inexpensive appropriate suggestions for interior decorations for a seaside home, as I am contemplating building a winter home in Palm Beach. I wish the effect to be very suggestive of the seaside. There will be a large living room finished in old ivory woodwork, with an open fireplace and long French doors leading out on the veranda. The stairway will lead up out of this room and I wish to use mahogany furniture in living room.”

Ans.—With regard to wall decoration of your seaside home, it is advised to use tints or flat tone paint, rather than coverings of any kind, as the latter are unfavorably affected by the sea damp. Sea greens and blues would be very appropriate in the dining room and these tones could be blended on the wall. A decorative frieze of gulls could be stenciled in the ceiling angle. There is a pale green Sun-dour fabric that would be very harmonious for window draperies.

We would do the living room wall in blended greys with slight tinge of green and use green rug with wicker rather than mahogany furniture, upholstering some of the wicker in cretonne showing tropical birds and green foliage on a light ground. The fireplace facings could be of greenish klinker brick.

We would have rough plaster in the natural grey in the den, with bog green stained woodwork, and decorate the wall spaces with beautiful seaweeds in brilliant coloring, corals and shells.

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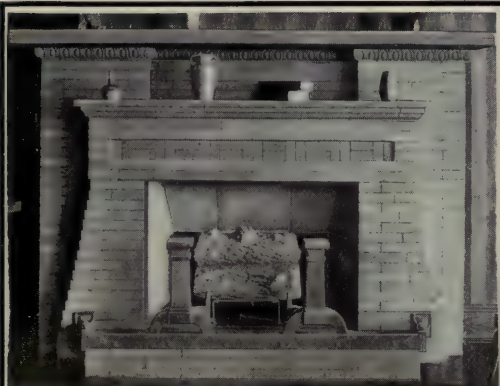
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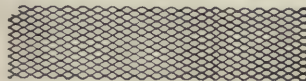


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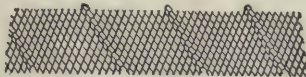


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The Problem of Adaptation.

 NCIDENT to the rising temperature and lengthening days of spring is the necessity of adapting one's self and one's family to the changed conditions. Happily for the present generation, it is not quite as difficult as it was once. Few people wear woolen undergarments, the heavy and rich food which used to be thought necessary in the winter has fallen into disrepute and the general spring house-cleaning has faded out of the practice of most housewives. Even so, spring is a time of trial in more ways than one.

Appetites flag in the warm days and the temptation is to start on a very light diet, which, more acceptable at the time, provides insufficient energy for the work as necessary in warm as in cold weather. Now is the time not to make essential changes, but to make the old articles of food inviting by novelties of seasoning and serving. Instead of frying the chops and sending them to the table floating about in their own gravy, trim off the surplus fat, broil them delicately over a handful of charcoal and cover them with a highly seasoned tomato sauce. With a steak, if you still afford steak, substitute for the usual gravy a maitre d'hôtel butter, with possibly a dash of horseradish. Accept as final the fact that only hard frost justifies the use of fresh pork, while smoked it is digestible and appetizing in mild weather. You will give your roast of veal or lamb an improving touch by a highly seasoned stuffing, and it will be clear gain if you dispense altogether with made gravies and turn the drippings from the roasting pan into the soup kettle.

It is a truism that the more green vegetables you eat in the spring the better. They are rich in mineral salts, which have a beneficial effect on the organs of digestion, and spinach is the best of them all. Paper bag cookery is admirable for these vegetables, as no water being used, all the salts are retained. It is true that spinach is rather discouraging, it shrinks so badly in cooking. This may be partially remedied, when the spinach is boiled, by saving a cup of the water and making a drawn butter with it, in which the drained spinach is simmered for ten or fifteen minutes. Spinach is often prepared in this way in restaurants and goes a good deal further than when drained and pressed into a tight mound, garnished with boiled eggs. It is well to learn the art of making a good drawn butter, as it is a better and cheaper sauce for many things than the ordinary cream sauce.

Naturally a great deal of fruit is eaten for spring time desserts, sometimes with serious results, when July brings an attack of rheumatism caused by the accumulation in the system of strawberry acid. While the free use of fruit is a capital thing, it must be remembered that the juicy fruits are not nutritious and that when they replace puddings, custards or pies, the amount of carbohydrates in the latter must be made up somehow. All this is a part of the art of the balanced ration.

As for the necessary changes of clothing, they should always be made in the morning, and the danger of taking cold is minimized by a cold sponge bath and brisk rubbing, with a good deal of active exercise during the day. Year by year



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brought another until now the farmers have a very large and profitable business.

The initiative need not come from the producer. It would seem as if in almost any community a number of women might combine and arrange with a nearby farmer to supply them with vegetables, eggs and poultry. Movements of this sort, though actuated only by self-interest, are all steps in the work of social betterment. Nor need we fear that the middleman will starve.

Adapting Paper Bag Cookery.

There is quite a comprehensive manual of paper bag cookery, but it is not within the reach of everyone, and its only advantage is in giving the time required for various articles of food. The limitation of paper bag cookery is that the food cannot be disturbed, once it is in the bag, in the oven. Naturally a certain amount of solidity is essential. You would have difficulty in getting a poor man's pudding into a bag. Given these limitations almost anything can be cooked in a bag, but the time will be a matter of experiment.

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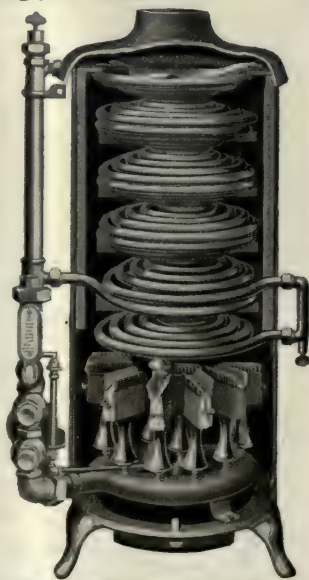
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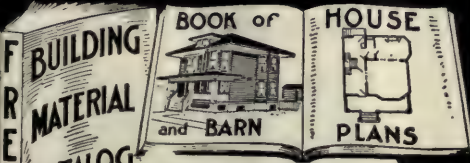
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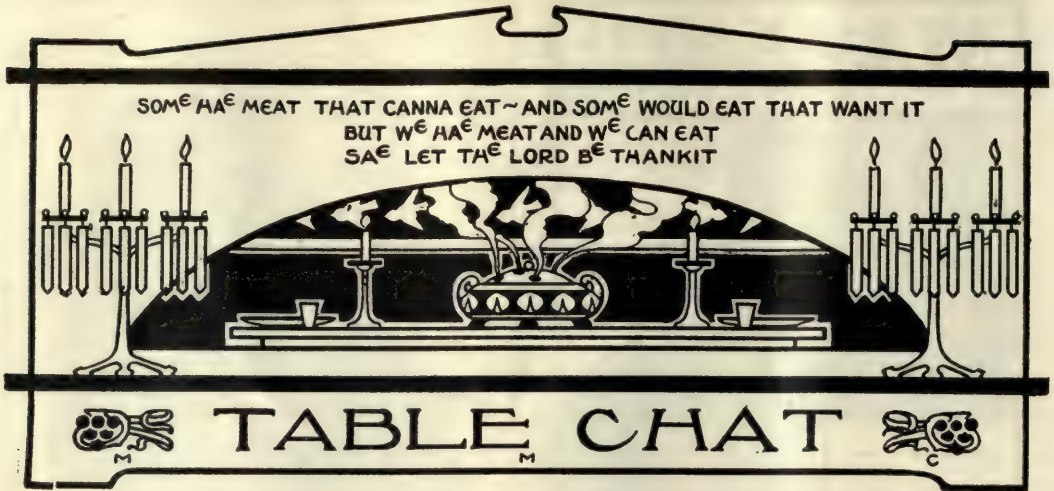
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The Pros and Cons of the Piazza Table.

Considered in the abstract the out-of-doors meal is delightful, but the reality is not always so charming. To serve the conventional meal on a piazza involves an immensity of work for some one, in the additional steps involved, and 't is extremely difficult to keep things hot. Add to these drawbacks the possibility of mosquitoes and flies and the disorder caused by vagrant breezes, and it is small wonder that the average family prefers the placid seclusion of the dining room.

The open air meal seems to be one of the things that is best adapted to the unusual family, or to exceptional circumstances. If there are only two of you, if breakfast is a leisurely meal, and you have electric appliances at your command, nothing can be more delightful than to consume your eggs and coffee and toast on a shaded piazza, with a charming view of earth and sky whenever you choose to raise your eyes.

Nor need a family be in the least ex-

ceptional to make it quite possible to serve a simply Sunday night supper out of doors. The fireless cooker, or its homemade substitute, makes a single hot dish practicable, and a tea cozy of generous dimensions insures the heat of the second cups of tea or coffee. If one has a chafing dish it is immensely useful for such an occasion, always provided that there is some sort of a draught screen for the lamp.

Another pleasant use for the porch or the paved terrace, if one is fortunate enough to have one, is for the service of after-dinner tea or coffee. You never, until you have tried it, know the charm of the separate service of tea or coffee in the library or on the piazza, and it has utility as well as charm, because it leaves the dining room free for the clearing-away processes just so much the sooner. It takes just a little courage to make the innovation, but it is worth while. And it affords one the excuse of having one of those charming trays with bottoms of chintz showing through plate glass, of which the shops show so many.

Apropos of these trays a caution is needed. Suit the tray to your china. If it is elaborately flowered have a plain mahogany, Sheffield or copper tray, and use with the chintz bottomed tray only china that is practically white, relieved with a little gilt or color. The chintz trays are particularly pretty for the brass coffee services that are sold for dens, although they are quite suitable for other rooms.

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Direct from factory to you—saving you store profits. We pay freight and guarantee your money back and removal of refrigerator at no expense to you if you are not absolutely satisfied.

Easy terms if more convenient for you. Send for book NOW—Letter or postal.

TABLE CHAT—Continued

Chinese Cane Trays.

Some of the city shops sell circular trays made of heavy Chinese cane, woven in a rather intricate basket pattern, and with a substantial rim. They are unusual looking, strong and serviceable, and cost only fifty cents each. They are about twenty inches in diameter, and are useful for other purposes than serving tea.

If the last is used, the imported lingerie batiste, sheer and not too fine, is the best choice, as it wears better than any other thin material. Caps are very tiny, collars and cuffs are hemstitched or pleated and the aprons are short, with bibs, not bretelles. In smart establishments where one or more man servants are kept, who wear liveries, the maid's



SPONGE CAKE AND STRAWBERRIES FOR A FOURTH-OF-JULY DESSERT.

I know of a tea room where they are used entirely and seem to be quite as strong as the usual metal ones.

The Dress of the Second Maid.

Fastidious people are beginning to make variations on the conventional black and white which has so long been in vogue for waitresses. No longer is any sort of a light colored cotton dress considered suitable for the morning hours. Plain colored chambrays or linens, green, old blue or gray are chosen, with caps and aprons of heavy linen. For afternoon the same color is worn, either in brilliantine or a softer woolen fabric, and the cap and apron are of thinner material, dimity, or handkerchief linen, or batiste.

dresses match the plum or wine color of the men's clothes.

Probably most housewives will retain the serviceable black brilliantine afternoon gowns for a good while, modifying the caps and aprons. The thin materials are certainly very much prettier and quite as durable as the thick cambrics to which we have been so long accustomed, and are much more easily laundered.

Sweet-Bread Salad.

An economical way of serving sweet-breads is as a salad. Cook a pair of sweet-breads for half an hour in salted water and cut the meat into small pieces. Whip half a cup of cream, adding to it a tea-

THIS IS INTERESTING!

We make **steel furnaces**—good ones—and we sell them direct to contractors and consumers, at factory prices. This is a little hard on the local dealers, and we are sorry for that, but it is such an advantage to the purchaser in saving money, and it is such an advantage to us to know what is expected of our furnace and how it is going to be placed, that we prefer to sell in this way.

We had occasion to write to a party in Montana, not long ago, about our furnace, not knowing that he was interested in the sale of other furnaces, and his reply contains this statement:



"We are agents for the.....Furnace Co., and find that it is to our advantage to handle that furnace, as you people sell direct to the people. We do not advise anybody who is inquiring about furnaces to get the Hess, as one sale of a.....furnace would give us as much as five sales of a Hess."

NOW, DON'T YOU SEE THE POINT?

The dealer who sells the furnace must have a profit, and the consumer who buys the furnace must pay that profit. The Hess furnace, sold direct to the people, is sold at a price which the dealer cannot match. Therefore he must handle some other kind which affords him five times the profit, and this profit does not add to the value of the furnace, but it comes straight out of the consumer's pocket.

We can tell you a lot more about the advantage of buying a furnace direct from the factory, and we will do so, if you will send us your name on a postal card, and tell us something about your requirements in this line.

HESS WARMING & VENTILATING CO.

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10% larger Bedrooms—50% larger wardrobe capacity and you can save from \$100 to \$300 in building a Home with "NEW WAY" Wardrobes built in flush instead of the old-fashioned, cob-webby, dusty closets.

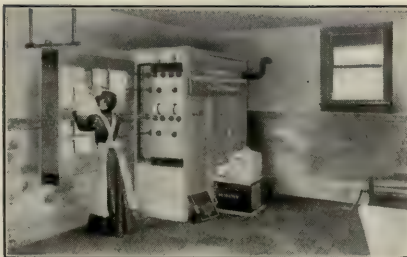
A home planned and built with these new space saving, sanitary and convenient wardrobes will be more comfortable to live in and much easier to rent or sell than if built with the old-fashioned dusty closets. Send 50c now before you forget it for our "NEW WAY" Home Plan Book, which shows 22 designs for homes, ranging in price from \$1200. to \$12000, all of which are planned with these "NEW WAY" wardrobes.

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Room 612, Architectural Dept., Grand Rapids, Mich.



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Is a valuable guide which every owner should carry with him on the job. Illustrated with cuts showing correct construction. Tells how to avoid mistakes. \$1. postpaid. M. L. KEITH, 426 McKnight Bldg., MINNEAPOLIS

TABLE CHAT—Continued

spoonful of gelatine which has been soaked in a tablespoonful of cold water, two tablespoonsful of hot water, the juice of half a lemon, salt and paprika to taste. Stir the diced meat into the cream, mould it and serve on lettuce leaves with mayonnaise dressing. This sort of a salad is conveniently served from a salad bowl.

Service in Pastry Cases.

Of course, some people cannot make pastry, or if they can mix it well they

it off and fill it with creamed or curried fish, meat heated in some sort of sauce, jellied chicken broken up with a fork, or a meat or fish salad. It is particularly nice for chicken or lobster. Or you may use it for a dessert by filling it partly full of stewed or preserved fruit, drained from its syrup and covered with whipped cream.

For small individual cases, to be filled with jelly or jam, you can use the underside of a muffin pan. Success in making



THE SALAD IS CONVENIENTLY SERVED FROM A SALAD BOWL.

lack the manual dexterity to manipulate it successfully. But if one can roll out and handle a thin sheet of paste, she has at her command a very pretty and novel way of serving various preparations of meat or fish, or salads.

An easy way with pastry cases is to bake them on the outside of a dish and not on the inside. Have a round or oval tin pan suitable size and butter it liberally on the outside. Turn it upside down and cover it with your sheet of paste, pressing it carefully into shape and trimming it off just below the rim of the pan. At this point put on a lift of paste to make an edge for the case. Bake it delicately brown in an oven of the right temperature, and when it has cooled slip

cases in this way depends very largely on the care with which the outside of the pan is buttered. The ten-cent stores are a great resource for the economical and ingenious. At two for five cents one gets small tin pans which are just the thing for making pastry cases for individual services.

Never make pie crust for just once. Make a good quantity and what you do not use the first day lay aside, wrapped in a cloth, in a cold corner of the refrigerator. It improves with keeping and it is a trifling matter to make it up later in the week. There are, after all, worse things than a good pie, and even the scrupulous may eat with comparative safety if the bottom crust is left out.

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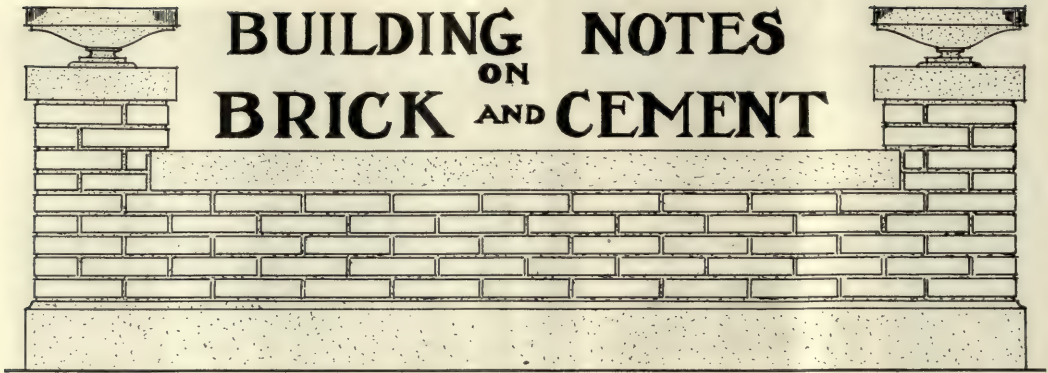
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BERRY BROTHERS' VARNISHES





Value of Concrete As a Fire Check.

IT was impossible to pass through the region of the spring floods without noting remarkable examples where concrete structures showed their permanence. One of the remarkable examples was the Beaver Power Co.'s building at Dayton, Ohio, which was in the path of the destructive fire which threatened to wipe out that portion of the city to which the residents had fled for safety from the flood. In the path of the flames was this one building. Its frame was of reinforced concrete, its window sash and its floors of concrete. There was nothing to catch fire. The building formed a perfect fire wall and prevented the spread of the flames. Had the floors been of wood joist construction it is probable that the flames would have passed through, but in spite of the concrete floors becoming so hot that water sprinkled on them turned to steam, the absence of inflammable material was a perfect check.

Cool Storage In Hot Weather.

The United States Rubber Co. is building a new addition to their Indianapolis plant and using reinforced concrete for frame, floors and roof because, in their experience, it is possible to keep the interior of a reinforced concrete building at a temperature as low as 50° or 60° F. through the warmest weather. The storage of rubber goods requires a reasonably low temperature and a concrete building meets this need admirably.

Concrete Storage of Coal.

It is rather strange that cement, which is one of the cheapest of all commercial

commodities, should be used extensively for the protection of the next cheapest commodity—coal. Several thousand barrels of Universal Portland cement were used by the Indianapolis Light & Heat Co., in the construction of a huge box 100x300 feet and 34 feet deep, in which to store over 30,000 tons of coal. This is a somewhat new development but it has been found that coal loses considerable in heating value when stored in the open, and furthermore that spontaneous combustion is almost impossible to prevent when coal is stored in large piles. The storage in concrete pits makes it possible to keep the coal under water from the time it is received at the plant until ready for use, and while it adds somewhat to the expense of operation yet it is insurance against loss.

Good Design.

The architect has felt that the field of good design with concrete blocks as a wall material has been somewhat circumscribed. The usual gray texture and plain face made by those block makers who have advanced far enough to drop the old rock faced pattern, with its monotony, has hardly given the architect a sufficient range. This, however, seems not to be the fault of the material but the methods of construction, or rather the inability on the part of the block makers to realize the wonderful possibilities of the material. When equipped with block machines which permit the use of a special facing aggregates there are possible unlimited variations of color and texture.

The May monthly Bulletin of the Universal Portland Cement Co. contains an illustrated article showing a residence in



St. Martin's School, Chicago, Ill., roofed with Asbestos "Century" Shingles by Paul J. Krez & Co., Contractor, and Herman Gaul, Architect, both of Chicago. Reproduced from an Artist's drawing.

Asbestos "Century" Shingles

"The Roof that Outlives the Building"

When you talk roofing to your architect, roofer or building contractor, Asbestos "Century" Shingles will come up for discussion of course.

Now there is just one thing to remember, Asbestos "Century" Shingles are made by the one perfected process for combining Asbestos and cement into a

shingle of uniform reinforced texture—and by people who control that process and know how to operate it.

And we are careful to see that they are handled by the roofing people in your section who know how to lay a good roof as it ought to be laid.

Write for names of representative roofers who can supply Asbestos "Century" Shingles, and Booklet, "Roofing: a Practical Talk."

Keasbey & Mattison Company

Factors

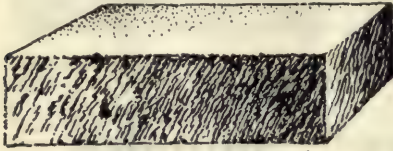
Dept. G, Ambler, Pennsylvania

Branch Offices in Principal Cities of the United States

Evanston, Ill., built with concrete blocks of three distinct colors and textures yet obtained at a very slight additional cost over plain blocks. The house is one of creditable architecture, costing in the neighborhood of \$7,000, and typical of a great majority of suburban homes, with a garage built in the basement and generous porches on both floors. That as attractive building as this appears to be, is possible with concrete blocks is proof that the material is susceptible of much wider treatment than has been accorded by the average block maker and equally good results may be obtained by many architects if they understand what may be expected in this rather new material.

Wire-Cut or Tapestry Bricks.

The object of all rough-faced bricks is to give to the exterior of the building the elements of beauty which dull finishes



Wire-Cut or Tapestry Brick.

and rough textures give to the interior of buildings. It is, furthermore, a copying of nature, for nowhere in the great outdoors do we find bright, polished, and reflecting surfaces other than those contributed by man. Of all the rough-faced bricks now known to building practice, none perhaps have so many elements of beauty, color, texture, variety, and lack of reflecting surfaces as the wire-cut or tapestry bricks. The individual bricks look rough and unfinished, and give no indication of the beauty of the texture of the walls they make when well laid.

Not only is there variety in color and texture, but likewise in size of tapestry bricks. They are the ordinary size tapestry brick made in the standard of pressed bricks, $8\frac{1}{2} \times 4$ inches; the Roman shaped tapestry bricks, $12 \times 2\frac{1}{2} \times 4$; and the "Real Roman Tapestry," which is $18 \times 2 \times 6$ inches in dimensions.

Pressed Bricks.

Pressed bricks are so extensively used and so well known that little can be said about them which is not a matter of

common information even to the beginner. They are made in such a variety of colors, from white to very dark brown, that almost any color within reason can be had. Color-prints of the various shades made can be had from the manufacturers on request. Some of the bricks are of plain color, while others are mottled; and some of the colors run uniformly, while others vary slightly from one another. In laying pressed bricks, some masons select the stock so as to have one uniform color throughout, while others allow them to mix, presenting various shades of color. It is each to his own liking, but it would seem that a better effect is obtained by taking the run-of-bricks and using them without sorting. It gets away from that sameness and monotony in a smooth uniform-color wall.—*Building Progress.*

* * *

A rather interesting case of the use of bulk cement in construction work occurred during the building of the Murphy garage in Minneapolis during the winter of 1912-13. It was found advisable to untie and empty the sacks of cement at the point of cement storage and to wheel the cement in bulk into the building, a haul of about 60 feet, rather than carry the sacked cement to the mixer and remove the sacks when empty. Had there been a siding near the work where a car of bulk cement could have been placed, a still greater saving would have been effected.

* * *

An interesting type of cistern is being built and marketed by the Patent Concrete Cistern Co., of Grand Forks, N. D. The cisterns are built in the company's yard and subsequently placed in excavations made of the proper size. The construction is novel and seems destined to replace cisterns of other materials.

Another interesting novelty which this company builds of concrete is a pork barrel which it is claimed is almost as cheap and much longer lived than the old fashioned stave barrel.

Materials Required in Laying 1,000 Brick

A thousand common brick laid in lime mortar, joints $\frac{3}{8}$ to $\frac{1}{2}$ in. and with proportions of one of lime to five of sand, will require three bushels of quick lime

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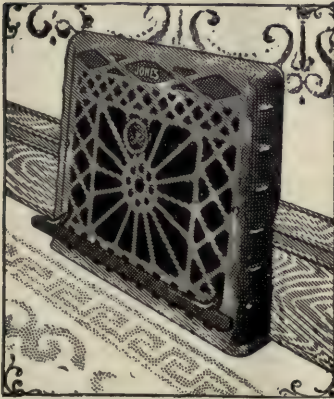
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Church at St. Petersburg, Fla., covered
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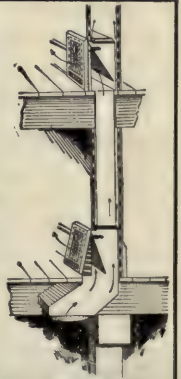
during the coldest weather may be secured by installing the "JONES" System of Heating, one principal of which is the heating of one room on two floors from the same basement pipe, insures not only a saving, but produces the results wanted.

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CHICAGO

BUILDING NOTES ON BRICK AND CEMENT—Continued

(3.7 cu. ft.) and about 18 cu. ft. of sand. This would make the cost of mortar per 1,000 brick about \$1.90.

This is estimating the cost of materials delivered on the premises as follows: Lime per bushel 30 cents; sand per cu. yd. \$1.50, and Portland cement \$2 per barrel. Brick, kiln count.

Now 1,000 common brick laid in Portland cement and sand with joints $\frac{3}{8}$ to $\frac{1}{2}$ in. and in the proportion of one of cement to about $3\frac{1}{2}$ of sand will require 1.25 barrels (5 sacks) cement to 18 cu. ft. of sand. The cost of this mortar per 1,000 brick based on prices quoted above would be \$3.50.

The materials required to lay 1,000 common brick in mortar composed of two-thirds cement to one of lime and 6 parts of sand, would be two sacks ($\frac{1}{2}$ barrel) of cement; one barrel ($2\frac{1}{2}$ bushels) of lime, and 18 cubic feet of sand, and the cost of this mortar for 1,000 brick would be \$2.87.

The mortar for face brick work would cost about the same, depending on the size of the joints and the proportions of the materials used. In case the mortar is wanted as white as possible more white lime should be used in proportion to the sand and as white a sand as possible should be procured.

The lime should by all means be slacked several days before using. The best way in using coloring in the mortar for face brick work is to thoroughly mix the dry sand and the coloring together before mixing with lime. If cement is also used, this, too, should be mixed in the sand when dry.

The amount of coloring required to

lay 1,000 brick will depend somewhat on the shade required, and it is hardly safe to figure less than 100 lb. The coloring material, sand and lime should all be carefully measured so as to maintain the same proportions throughout, to the end that when mortar is dry in the wall it will all be of a uniform and even shade.

In face brick work where it is desired to use colored mortar the brick should be well wet, in dry weather especially, for unless this is done the dry brick will quickly absorb the moisture from the mortar and with it the coloring, leaving the mortar joints lighter in shade than intended and also uneven.

With the cost of the coloring materials and the extra work of mixing and measuring the coloring ingredients it is worth from \$3 to \$4 per 1,000 brick extra for colored mortar on small jobs.

Below will be found a table which may be of value to some of the younger men in the building trades. It shows the quantity of mortar required to lay 1,000 brick—kiln count—with varying sizes of joints, the size of brick being about $8\frac{3}{4} \times 2\frac{3}{8} \times 4$ in.

Joints $\frac{1}{8}$	require 8 cu. ft. of mortar to the 1000 brick
Joints $\frac{1}{4}$	require 10 cu. ft. of mortar to the 1000 brick
Joints $\frac{3}{8}$	require 12 cu. ft. of mortar to the 1000 brick
Joints $\frac{1}{2}$	require 15 cu. ft. of mortar to the 1000 brick
Joints $\frac{5}{8}$	require 18 cu. ft. of mortar to the 1000 brick
Joints $\frac{3}{4}$	require 22 cu. ft. of mortar to the 1000 brick
Joints $\frac{7}{8}$	require 26 cu. ft. of mortar to the 1000 brick

—The Building Age.

Brick for Building Purposes in Austria.

Many of the bricks used in Prague, Austria, are yet made by hand, both women and men working in the yards. Practically all the buildings are constructed of brick and plastered on the outside. The bricks are larger than those commonly used in the United States and not so well finished, not being used for facing the outside walls. The ordinary building bricks sell at about \$8 per thousand. Many new buildings are being erected, which makes the brick business one of the best in the city. Large quantities of brick and stone are brought to Prague from points up the River Moldau, as labor is not well paid in these more distant villages.

Minneapolis will use 65,000 bbls. of Portland cement for 1913 paving. Evidently her experience with concrete pavements has been entirely satisfactory.

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and see how the
ALDINE FIRE PLACE will heat your house.



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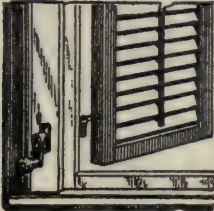
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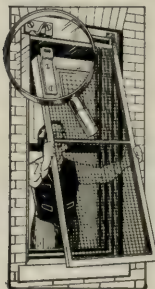
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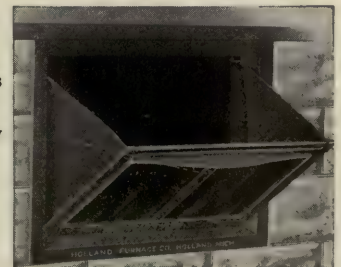
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CUSTOM—made, perfect-fitting, rust-proof Window Screens our specialty. **Catalog free.** 048 Center St. Phenix Mfg. Co. MILWAUKEE



The Window Chute

A Real Window — A Perfect Coal Chute



Useful 364 days in the year for light and one day for the coal man.

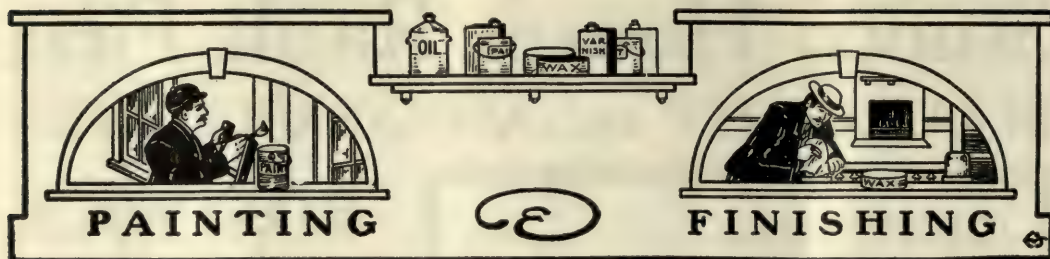
A Burglar-Proof, Air-Tight Window which conforms with architectural lines. Looks best and is best. Write for booklet giving full description.

Holland Furnace Co.

Department "K"

HOLLAND, MICH.

"Holland Furnaces Make Warm Friends"



"Stained and Varnished."



HE question of staining interior woodwork, furniture, etc., is becoming more interesting each day. The "natural" style of finish which was so popular has been largely supplanted by the more attractive and in every way more desirable stained and varnished effects.

Generally speaking, stains may be divided into three classes. Oil, water (or acid) and spirit stains. Most colors in the oil-stain line have many advantages over any other type of stain. There are two exceptions to this rule, mahogany and silver gray. These two colors do not possess the necessary permanency if made as oil stains. When used on mahogany, birch, maple, etc, mahogany stain should be of the water (or acid) type or of the spirit type (preferably the former) if the greatest permanency is desired.

Water and spirit stains have a natural tendency to raise the grain of the soft woods. With the harder, closer grained woods this is not serious.

Stains commonly classed as oil stains represent a combination of dyes soluble in various liquids, each dye being separately dissolved in its required solvent and then combined in one mixture.

Genuine fumed oak cannot be secured by the application of a prepared stain. The only manner in which it can be obtained is by placing the wood—in the white—in an air-tight room or enclosure and subjecting it to the strong fumes of commercial ammonia. The better classes of fumed oak are produced by going over wood which has been treated in this way with a stain which will even up the natural variation in the effect because of the variation in the wood. This is followed by a thin coat of pure white shellac

and then waxed or given a coat of mission-lac.

When a wax effect is desired it is best to use a coat of shellac, mission-lac and then the wax. The most desirable results are obtained, however, by rubbing mission-lac to a dull finish with pumice-stone and oil.

All stained effects, such as Antwerp oak, brown oak, old English, etc., should be followed with a very thin coat of shellac within forty-eight hours after application of the stain. This will add to their permanence.

Due consideration should be given to the fact that two pieces of wood taken from different trees and worked into one piece of furniture or interior trim will show a variance in the finished effect. As an illustration, it is impossible to obtain the same effect on red oak as on white oak. It is therefore a physical impossibility to stain uniformly a door which has been composed of a combination of red oak and white oak.

It is likewise impossible in producing such delicate effects as silver gray to stain a wood so as to obtain a lighter effect than is actually represented by the wood itself. Silver gray effects can only be obtained by using the whitest of oak, maple, birch, etc. Red oak and similar dark woods are not satisfactory, and even though a temporary pleasing effect may be produced, the natural color of the wood will in the end predominate.—*From the "Spectrum," March issue.*

Doing Up An Old Varnish Floor.

A. Ashmun Kelly, in Paint and Oil Dealer.

It is well always to carefully specify the actual condition of a floor when seeking advice about its re-finishing. If the floor is in fair condition with only some shoe scratches, etc., the task is easy. Try the scratches with some oil, and if the



Residence of J. E. Wing, Mechanicsburg, O.
E. E. Holman, Architect, Philadelphia, Pa.

"The house is framed in the usual way, and sheathed solid with hemlock boards, put on over Sheathing Quilt nailed to the studding."—Country Life in America, March, 1907.

The Cost of Cabot's Sheathing Quilt for Lining this Entire House was \$36.69

The house will always be warm in winter and cool in summer. The quilt will save enough coal in two average winters to pay for itself, and then it will keep on saving fuel and doctor's bills and making the whole family comfortable as long as the house stands. It is cheaper to build warm houses than to heat cold ones—and more healthful and comfortable.

Send for a sample of Quilt—it is not a mere felt or paper, but a real protection.

SAMUEL CABOT, Inc.

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Agents at all Central Points



Herringbone Houses

are cool in summer and warm in winter, offering all the advantages of stone or masonry, at the cost of wood.

The old-fashioned wooden house, with its constant fire risk and the frequent repairs required to keep it looking well, is no longer considered by those who know the advantages of the modern way of building.

A stucco house built with Herringbone Lath is now a possibility for any home-builder. It has been proven the most economical as well as the most artistic and permanent type.

Its first cost is almost as low as that of an inflammable wooden house; its final cost is very much lower.

If you are about to build, send for our handsomely illustrated booklet showing many types of the popular Herringbone Houses. Mailed free on request. Write for it today.

The General Fireproofing Co.

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Logan Ave.

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SAMSON SPOT SASH CORD

Solid
Braided
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Strong
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Made of extra quality stock and guaranteed free from all bad splicing and rough braiding.

The Spots On The Cord Are Our Trade-Mark

used only in this quality. Will outwear common roughly braided cord or metallic devices many times over. Send for copy of tests showing its great durability.

For sale by Hardware dealers. If your dealer cannot supply you, order of us direct giving his name. Write to-day anyway for sample and our illustrated booklet No. 4 showing various kinds of Samson Cord. A handy guide to buying.

Samson Cordage Works
Boston, Mass.

oil obliterates the marks, then make the floor clean and apply the coat of regular floor varnish. But if the oil does not hide the marks, then sandpaper them until they are removed, and apply the varnish. Where a floor has been well cared for and touched up year after year, with maybe a coat of varnish now and then it will have too much stuff on it to wear well, and then it is best to remove it all with some remover and the scraper or steel wool, until you get down to the original wood surface. Then revarnish as for a new floor.

As a rule, a renovated floor will not wear as well as a new floor, and this is well to know, for if complaint is made by the customer you have the explanation at hand, and so avoid trouble. This may be due to leaving some of the remover behind, which will affect the finish. At any rate, no matter how carefully you may do the job it will not wear as well as at first.

To touch up an old floor, in spots, apply a coat of paint as near the general color of the floor as you can get it, and when dry varnish the entire surface. Use flat color, and to the varnish add enough stain to match the surface of the floor.

Putty Marks On Ground Glass.

In glazing around ground glass some of the putty gets into the finely roughened surface, and the same with any rough surface glass, and how to get it out bothers. Some painters use potash, in water, applied with a rag on the end of a small stick. This soon eats away the putty, after which it may be washed with clear water. And the putty may be prevented from getting into the glass by rubbing some soap around the part next to the glazing. But the soap under the putty might not be just the right thing. Then we might try rubbing the cut side of a raw white potato on the glass, or some water and whiting, which let dry, then after done with the glazing dust off and wipe up clean.

Substitutes of Circassian Walnut.

One of the world's best known and most expensive cabinet woods is Circassian walnut, and of it the United States

is probably the largest consumer. The high cost of Circassian is due to the scarcity of the beautifully figured variety demanded for interior finish of houses and for furniture, for the tree itself is more widely distributed than almost any other of commercial importance, says the Department of Agriculture. The demand for the best wood, however, has always outrun the supply. Even in the eighteenth century when wars in Europe were frequent, so much Circassian walnut was used for gunstocks that the supply was seriously depleted. Early in the nineteenth century the wood of 12,000 trees was used for this purpose alone. Single trees containing choice burls or fine bird's-eye figures have sold for more than \$3,000.

The tree is native to the eastern slopes of the Caucasus and ranges eastward to the foothills of the Himalaya mountains, from which it extends southward to northern India and the mountains of upper Burma. It has been widely planted in Europe and the United States, in this country under the name of English walnut. The wood grown here, however, has not the qualities demanded by the cabinet and furniture maker. Much of the Circassian walnut now used comes from the Black Sea and from other parts of Asia.

According to a circular just issued by the Forest Service the demand for Circassian walnut has resulted in the substitution of other woods. Our own red gum is often sold as Circassian walnut, and butternut is also similar in general appearance to the less highly figured grades. Many good African, Asian, and South American woods resemble Circassian walnut, though none possesses the magnificent figure, delicate tones, and velvety texture of the latter. The circular discusses the supply and uses of Circassian walnut, and those who wish to know how possible substitutes may be distinguished can learn from this circular the distinctive marks which the government's experts have discovered.—*The Building Age*.



No Paneling Strips Required

You can paint, paper, tint or kalsomine the walls that are finished with

Roberts Ideal Wall Board

The edges fit tight and close leaving no cracks or uneven places. Panel strips are not necessary. Merely butt the edges of the wall board and cover them with our invisible joint binder and you have a perfect wall which you can decorate to suit your own taste.

Roberts Ideal Wall Board is easily applied, sanitary, clean, durable. It makes the house warmer in winter and cooler in summer and more attractive all the time. It costs only half as much as lath and plaster.

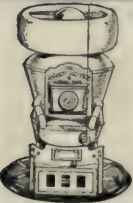
Write for booklet, sample, testimonials and name of our agent in your locality.

THE ROBERTS MANUFACTURING CO.

103 Railroad Street

MARION, INDIANA

BUY YOUR FURNACE \$10 DOWN \$10 A MONTH



Our monthly payment plan of selling direct saves you the dealer's profits and charges for installation. The

Jahan Furnace

with the patented "Down Draft System" is best for residences, schools, hotels, churches, etc., because it delivers plenty of heat wherever and whenever desired at a saving of 1-3 to 1-2 in fuel bills. Install the Jahan yourself. We send complete outfit, freight prepaid with special plans, detailed instructions and all necessary tools for installation. Satisfaction guaranteed or money refunded.

Write for free illustrated book.

THE JAHAN HEATING CO.

160 Mill Street

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Save 1/3 to 1/2 on Fuel Bills

IXL ROCK MAPLE AND BIRCH FLOORING



"The Finest Milled
Flooring in the World"

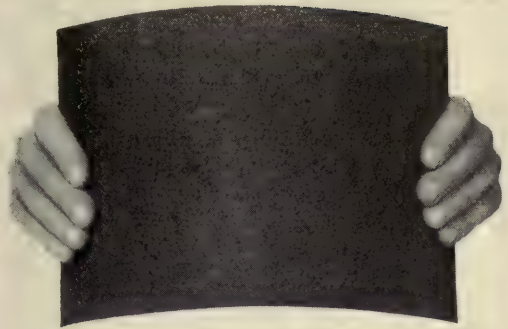
Q One important feature is the wedge shaped tongue and groove which enters easily, drives up snug and insures a perfect face at all times without after smoothing, an advantage that is not obtained by any other manufacture.

Our method of air-seasoning and kiln drying has stood the test for thirty years.

ASK FOR IXL 1912

Address

Wisconsin Land & Lumber Co.
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Unusual, Beautiful Architectural Effects

WITH usual roofing materials it is impossible to produce such a unique, attractive roof as that illustrated below. But with Reynolds Flexible Asphalt Shingles roll edges, thatch effects and rounded corners are easily made. Such a roof adds real distinction to a well-designed, well-built home, whether modest or most pretentious.

The fact that Reynolds Asphalt Shingles may be bent to any required form does not imply that they are flimsy or soon destroyed. On the contrary, they last longer than wood shingles. They cannot warp, split, crack, curl, drop or blow off. Sun, snow, rain, hail fail to impair their usefulness or beauty.

Furthermore, Reynolds Asphalt Shingles are a real protection against fire. Flying sparks cannot set them ablaze. They save part of your insurance cost.

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Guaranteed for 10 years—
will last many years longer—

are made of crushed slate or granite securely imbedded in pure asphalt. Natural colors of garnet, red or gray-green which never fade and never need painting. We are the original makers of flexible asphalt slate shingles and tested them for ten years before putting them on the market. They are uniform in size—8 inches by 12 1/4 inches—and are laid 4 inches to the weather. Your building-supply or lumber dealer can get them for you.

Let us send you a booklet showing
photographs of modern houses

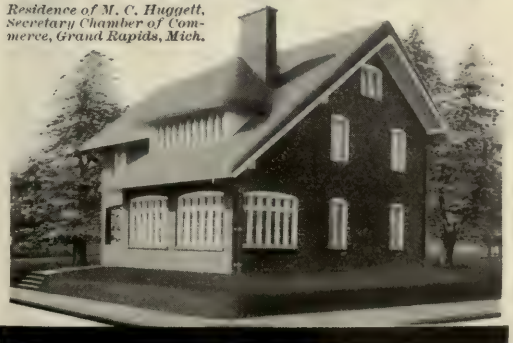
roofed with Reynolds Asphalt Shingles—signed opinions of the owners are included. Also opinions of leading architects and builders. Write for a copy TO-DAY.

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Established 1868

Residence of M. C. Huggett,
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merce, Grand Rapids, Mich.



Heating, Lighting and Plumbing

Comparative Efficiency of Heating by Electricity, Gas and Coal.

THE question is frequently asked us regarding the comparative efficiency or cost of heating a building by electricity, gas, hard coal and soft coal. The examples stated below will give anyone an opportunity to determine this for himself by employing the figures or costs available in his own locality.

Heating by Electricity.

The heating value of one Kilowatt-hour is approximately 3,400 thermal units—therefore, at 10c per Kilowatt-hour, one cent will purchase 340 thermal units.

At \$7.50 per ton hard coal—making available about 8,000 thermal units per pound—one cent will purchase 21,333 thermal units. At this rate it would cost sixty-two and seven-tenths times as much to heat with electricity as with coal.

Heating by Gas.

The available heating value of one cubic foot of gas for heating purposes is approximately 600 thermal units per cubic foot. At 50c per 1,000 cubic feet, one cent would purchase 12,000 thermal units.

With coal at \$7.50 per ton—as above—it would cost one and eight-tenths times as much to heat with gas as with hard coal.

With electricity and gas on the same basis—as above—but with soft coal—having a heating value of 6,000 thermal units per pound and selling at \$3.50 per ton—it would cost one hundred times as much to heat with electricity as with soft coal—and two and nine-tenths times as much to heat with gas as with soft coal.

Influence of Coils in Boilers.

Whether we utilize the units of heat liberated in the combustion chamber of a heating boiler for heating the water, or for heating water in a domestic coil (the

hardest conceivable tax to impose on a boiler), or to heat the cellar atmosphere, or the cellar ceiling over the heater, or to warm the entire chimney and everything that comes in contact with it, the little heat unit is doing its full part in every instance.

When we agree in establishing the power of any boiler, that we will burn so many pounds of coal per hour, we have thereby made a contract for just so many heat units per hour, and they can each and every one be accounted for; they will present themselves and be absorbed by the matter with which they have been surrounded, and the number of heat units absorbed in any portion of the matter depending upon the difference in temperature between that portion of matter and the temperature of the products of combustion; the wider the difference, the greater its heat absorbing capacity.

—*Ideal Heating Journal.*

The Abuse of Plumbing Fixtures.

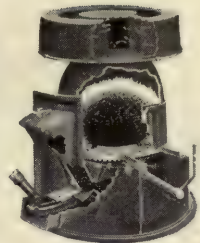
Quite recently the writer had occasion to watch closely the installation of a decorated exterior tub, of the type which tiles into the wall and floor. The tile setter and plumber were requested to handle the fixture with care in order not to mar the outside finish.

The tile setter followed instructions admirably, even going so far as to fully cover the fixture inside and out with a large tarpaulin, in order to prevent its being splashed. When he had finished his work the tub was perfectly fresh and clean, but after the plumber had put on the brass fittings there was an entirely different story.

The end of the tub on which the supply and waste fittings were installed was entirely covered with the marks of greasy fingers and hands, and there were several deep scratches in the outside finish, indicating that his wrench had slipped, or

UNDERFEED

Cuts Your Coal Bill



FURNACE

$\frac{1}{2}$ to $\frac{2}{3}$



BOILER

YOU can't expect your coal dealer to cut his prices \$2 or \$3 a ton, but the UNDERFEED will do it. DON'T buy costly anthracite or lump soft coal. Install an UNDERFEED. The same amount of cheaper grades, which cost \$2 or \$3 less per ton, will yield as much clean, even heat in the UNDERFEED as highest priced grades. The UNDERFEED saves $\frac{1}{2}$ to $\frac{2}{3}$ of coal bills. Investigate. Write TODAY for our FREE book. Plan during these summer days to install

An Underfeed is a splendid investment. Mr. Charles Gilbert, 174 Calhoun St., Battle Creek, Michigan, writes:

"Last winter I only paid out \$50 for fuel, heating 17 rooms (4 suites), besides the suite of rooms we live in. It

cost me \$140 to heat the same space with a topfeed. Besides this big saving, I collected \$100 from tenants for heat; so, I figure my furnace has entirely paid for itself in one season. My advice to parties with topfeed furnaces is: Unless you have money to burn, buy the UNDERFEED."

Sensible Coal-Burning Way

In the Underfeed coal is pumped up into the fire-top from underneath the fire and like a candle burns from the top down, which insures perfect combustion, and thus even heat.

Heat From Waste

Smoke and gases (40 to 50 per cent of the heat units in coal) wasted up topfeed chimneys, must pass up through the flames, are entirely consumed and make MORE heat. Here's where ANOTHER saving comes in.

THE PECK Williamson Underfeed FURNACES BOILERS

Always Clean

The fire, always on top, is in close contact with clean, heat-responsive metal. Therefore, no soot-covered, hard-to-clean, heat-retarding surfaces. No clinkers. Few ashes. Requires less attention than other heaters.

Send coupon today for free Warm Air Furnace Book or Steam and Hot Water Book. Heating Plans and Estimate of cost FREE.

THE WILLIAMSON CO. 385 W. Fifth Ave. PECK-CINCINNATI, O.

Send me—FREE—

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Furnace Book
Boiler Book

(Indicate by X Book you desire)

Name _____

Address _____

Name of my dealer _____

Make Your Own Gas

THE pleasure of living in the country or small town is greatly enhanced by a few city conveniences, the most necessary and comfort giving of which is a Satisfactory Gas Supply.

Gas to Light with.

Gas to Cook with.

Gas for Laundry purposes:

Gas to heat water for the bath and other uses.

Gas to operate a gas engine for pumping and other purposes.

You can have all these conveniences cheaply and automatically by installing the

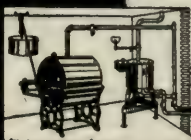
DETROIT Combination Gas Machine
FOR ILLUMINATING AND COOKING

Will not increase your insurance rates. On the market over 40 years. More than 15,000 in use in Residences, Stores, Factories, Churches, Schools, Colleges, Hospitals. It will Pay You to Investigate. Write us today—NOW—a post-card.

DETROIT HEATING & LIGHTING CO.

362 Wight Street
Detroit, Michigan

Attractive Proposition to Plumbers



Carburettor under ground

Machine in basement



\$22.50

"From Factory to You"

For this Elegant, Massive selected Oak or Birch, Mahogany finished Mantel.

Beveled Mirror
18 x 36

Price includes our "Queen" Coal Grate with

best quality enameled tile for facing and hearth. Mantel is 82 inches high, 5 feet wide. Furnished with round or square columns, as shown in cut.

Dealer's price not less than \$35.00.

CATALOGUE FREE

We send our 100-page Catalogue, the finest ever issued, free, to carpenters, builders, and those building a home.

Central Mantel Company

1227 Olive St., St. Louis, Mo.

was carelessly permitted to rub against the tub.

The condition of the tub was really distressing after the plumber took his leave, without even trying to restore it to its original condition.

It is universally agreed that a good job of plumbing is the plumber's best advertisement. On this particular job the piping system indicated the best of workmanship, but the installation of the fixtures was quite the opposite, and it was the result of nothing but pure carelessness and indifference. The owner was left with anything but a good impression, and the chances are that he would not employ the same plumber in the future.—*Modern Sanitation*

Heating by Electricity in Seattle.

The municipal lighting plant in Seattle, Wash., has been able to supply electric current at such a low cost, due to its splendid water power at Cedar Lake, that the authorities are seriously considering the furnishing of electricity for the heat-

ing of buildings. The City Lighting Department, under the direction of Supt. J. D. Ross, is now operating several test installations where the houses are heated and all cooking and heating of water is done electrically. A number of questions in this connection have still to be solved, such as thermal installation, off peak and on peak loads, before the practicability of the scheme can be determined.

1697 Lighting Plan.

Sometimes we are apt to think about all the ideas worth while originated with us. Various men and different lighting systems have shown a disposition to claim originality in suspending lamps from store fronts for the dual purpose of displaying the front and lighting the street. One of those research fellows who delight in delving into the musty past now comes forth with the information that the "common council of New York in 1697 ordered the city to be lighted by lanterns suspended from poles that projected from every seventh house."



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WANT
THE
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Royal Round Hot Water Heater.

Royal Sectional Steam and Water Heaters.

MANUFACTURED BY

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Bungalow Design And Plan Book



Free

It contains many new ideas and suggestions in the way of reproductions from actual photographs and floor plans of true and modified types of practical, beautiful Pacific Coast bungalows and two-story residences, designed by leading architects and built "from crest to foundation" with Washington Red Cedar Shingles. We have no books and plans to sell, but are manufacturers of Red Cedar Shingles and are anxious to tell you the truth about them, their beauty, utility, extreme durability, and the different grades. Send 2-cent stamp to cover mailing.

RED CEDAR SHINGLE MANUFACTURERS' ASS'N
494 Arcade Annex, Seattle, Wash.

HESS MEDICINE SANITARY LOCKER



The Only Modern, Sanitary STEEL Medicine Cabinet

or locker finished in snow-white, baked everlasting enamel, inside and out. Beautiful beveled mirror door. Nickel plate brass trimmings. Steel or glass shelves.

Costs Less Than Wood

Never warps, shrinks, nor swells. Dust and vermin proof, easily cleaned.

Should Be In Every Bath Room

Four styles—four sizes. To recess in wall or to hang outside. Send for illustrated circular.

The Recessed Steel Medicine Cabinet **HESS, 917 L. Tacoma Bldg., Chicago**
Makers of Steel Furnaces. Free Booklet.

New Roofing Discovery

Works Wonders in Beautifying Home!



For Simplest and Grandest Homes

CCHARMING Moorish beauty and dignity of appearance of Metal Spanish Tile gives an air of distinction to the home graced by this wonderful new and practically indestructible roofing.

It has taken home builders of America by storm, for it is the modernization of the wonderfully beautiful roofs of historic Spanish edifices.

The art of making this roofing, left behind by fleeing Moors driven out of Spain centuries ago, until 1910 could not be made practical for the modern home, despite its alluring beauties.

After years of experiment, we have hit the solution. That is why today we are able to offer American homes the amazing attractiveness of

Metal Spanish Tile Roofing

Its scores of vital, practical advantages cost no more than common roofing, yet mean tremendous economy—it needs no repairs and outlasts several ordinary roofs because of its practically indestructible metal construction.

It is absolutely wind, weather, storm, fire and lightning proof.

Easy to apply. No soldering, no special tools—any ordinary mechanic can apply it. Interlocking system by which tiles dovetail into each other makes the roof absolutely water tight and provides for expansion and contraction perfectly—summer and winter. It is guaranteed non-breakable.

HOME-BUILDERS—Simply send us today the dimensions of your building and we will tell you by return mail exact cost of all material. Our new 1912 book on beautifying the modern American home by use of **Metal Spanish Tile** is yours for the asking. A postal will bring it. Address

The Edwards Manufacturing Co.

*The Largest Makers of Steel Roofing
and Metal Shingles in the World*

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CINCINNATI, OHIO



That's the Furnace for OUR New Home

Now's the time to settle the furnace problem—to decide upon the heating equipment for your new home. You want a furnace that you can depend upon—one that will give you clean, healthful heat the year around at an economical cost. Pick the

XXth Century Furnace

40,000 families use this furnace—they know what real heating comfort is. And they are saving money every day because they are getting a third more heat at a third less cost.

XXth Century Furnaces have an exclusive side-burning fire pot and positive air feed—a pot that gives perfect and complete combustion and burns all kinds of fuel, even cheap grades of soft coal and slack. It consumes its own gases and smoke and does not throw off any fumes or soot. In short XXth Century Furnaces give you a well heated home without any of the trouble, expense or inconvenience of the ordinary furnace.

Every Furnace Installed Under Our Supervision

When you buy a XXth Century Furnace you are insured of perfect installation—our Engineering Department sees to that. And the service does not cost extra.

Write us today mentioning the number and size of rooms to be heated and we will tell you what style furnace you need and where you can get it on our Common Sense Guarantee. Ask for Booklet 46 on Home Heating.

**XXth Century
Heating
& Ventilating
Co.**

Akron, Ohio



SPLINTERS AND SHAVINGS

Birch as a Hardwood.



HE commercial term "hardwoods" is a misnomer, since it does not describe the properties of the woods to which it refers. Several so-called "hardwoods" are softer than the so-called "softwoods," while other "softwoods" are harder than some "hardwoods." As ordinarily used, the term "hardwoods" is applied to all trees that are classified by botanists as belonging to the group of broad-leaved species, while the term "softwoods" is applied to the needle-leaved, or coniferous species, such as the pines, spruces, firs, cedars, larches, cypress, etc. For example—the wood of yellow poplar, cotton, gum and basswood, so-called "hardwoods," is softer than that of longleaf pine, a so-called "softwood."

Birch is a hardwood both in name and in fact, and its physical characteristics of weight, strength and hardness, place it in the same class with hard maple, oak, walnut, beech and rock elm.

The sapwood of Yellow Birch is yellowish—the heartwood light to dark-red-dish brown. It is the heartwood of birch that furnishes the beautiful Red Birch, which has no superior, even in Mahog-

any. Both sapwood and heartwood take a brilliant, satiny polish. The figure of curly birch is especially attractive, while the sparkling lustre of the finished wood gives a richness of tone, such as is usually looked for in only the costliest imported woods.

The toughness and density of birch, together with the natural beauty of the wood, make it one of the most beautiful and durable materials for floors in residences and high class buildings. The close, interwoven fibres of birch resist wear and do not splinter up. Accurate tests have proved that under the same conditions of use, birch is more durable than oak.

Stains Adapted to Birch.

The ease and permanence with which birch takes the finest stains and finishes or white enamel, give it an increasing popularity with architects and builders of high class apartments, hotels, residences, stores, hospitals and office buildings. For many purposes, finish in the natural color of the wood itself is most attractive, while strikingly rich effects can be secured by the use of red and curly birch.

It is the close grain of birch, together with the fine, variegated figure, that make it possible to stain the wood almost any color with a result that is both pleasing and permanent. So many beautiful effects can be produced that a house finished throughout in birch is in the best of taste. The living room, dining room, den and sleeping rooms can each be given an appropriate individual aspect, and yet all be in perfect harmony.

In addition to finish in natural colors and with white enamel, for which birch is especially adapted, the following stains can be depended upon to give permanent satisfaction if properly applied upon birch: Cherry, Circassian walnut, mahogany, walnut, light green, dark green, fumed oak, bog oak, gray, mission brown.



Building? Get This Free Book

It tells all about the proper method of finishing floors and interior woodwork, and improving furniture. A big help in beautifying the home—new or old.

Johnson's Wood Dye

Comes in 17 harmonious and natural shades. Makes cheap, soft woods as artistic as hard woods.

If you are interested in building we will mail you free a Dollar Portfolio of Wood Panels, showing all popular woods finished with Johnson's Wood Finishes. Remember—the Panels and the 25c book Edition K. E. 7, are Free and Postpaid.

Take this ad to your dealer—or write

S. C. Johnson & Son, Racine, Wis.
"The Wood Finishing Authorities"



A Vulcan- tile Shingle Roof

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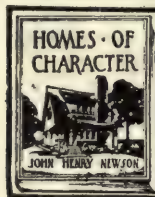
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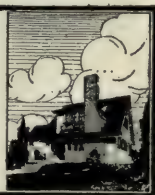
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THE DETAIL OF THE GARDEN ENTRANCE.

KEITH'S MAGAZINE

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AUGUST, 1913

No. 2



THE QUADRANGLE, OPENING UPON THE GARDEN.

A Suburban Home in Wellesley, Massachusetts

Photographs by T. E. Marr



THE suburbs of Boston abound in interesting examples of home architecture. A leisurely trip through the cities and towns of eastern Massachusetts is a source of keen pleasure and also of inspiration to the enthusiast in house building. One need not be a professional to experience this pleasure and to profit by the suggestive-

ness of these charming homes. Truth to say the lay mind is often more appreciative of the felicities of domestic architecture than the rank and file of the professional wielder of rule and triangle, too many of whom are bare of ideas, and can only move along cut and dried familiar lines. They can no more understand the atmosphere of Plantagenet, England, that



THE HALL—ARCHITECTURE IN THE TRUE SENSE OF THE WORD.

one feels in the overhang of a Jay Wheeler Dow cottage, than the driver of an ox-cart understands the poetry of the pine woods through which he hauls his logs.

But for the lover of quaint and unusual effects in houses, be he lay or professional, I know nothing more satisfying than trolley trips through these eastern suburban towns, stopping at one's fancy to study what takes the eye.

The house we illustrate is one of these choice "finds." Wellesley is one of Massachusetts's prettiest suburbs, and this house is delightfully placed amid stately elms and lofty maples, with here and there a larch or a red-leaved beech. The architect is Mr. E. L. Sylvester, Boston. The construction is wood frame, coated with light grey stucco. We have chosen the garden side of the house to illustrate on account of its appealing grace. Our

frontispiece gives the enlarged detail of this entrance. The grey stucco offers just the background and texture for the picturesque white lattice treatment of the entrance itself and the right wall of the quadrangle, with which the pergola roof of the porch is in complete accord. So too, are the many panel, white framed windows, and the projecting roof rafters. The grey roof shingle is delightful—so many would have made it green or red—and so are the grey stucco chimneys—plain, almost severe. The touch of color is given by the green shutters and the clinging vines.

A house arranged to form a quadrangle is always more difficult to design than a straight facade. Only a skilled architect can handle the problem successfully. It has been admirably treated here. We do not see the front of the house which is

well set back from the street. The quadrangle opens upon the garden, and shows the pergola-roofed porch upon which the living room opens through French doors. This porch is screened in and is sometimes used in hot weather as a sleeping porch. The main portion of the house contains the living and dining room and hall, and they are so planned that they can be thrown into practically one enormous room. The service portion, comprising kitchen and laundry is located in one wing. All the floors of the service portion are of $3\frac{1}{2}$ inch square brick tiles, and the baseboard is of the same material. Above this is three feet of hard cement plaster and above this the plaster walls are painted. The woodwork is North Carolina pine, simply varnished. As the owner is a physician, special pains has been taken to make everything about this part of the house sanitary and easily

cleaned, though he seems to have balked at white woodwork in the kitchen.

As a matter of fact white woodwork, if well done, is easier to keep clean than any other. The point is it shows soil more readily; but who would use grey linen for towels because the dirt would not show up so quickly.

In the living rooms of the first floor the wood trim is all whitewood, painted white, several coats being used, each one rubbed down to a satin finish.

Photographs are shown of the hall, living and dining rooms, and even the photograph reveals the beautiful quality of the finish. The elegance of the architect's interior detail is apparent at a glance. While simplicity itself it has the charm of perfect proportion and fitness of ornamentation. There is nothing, for instance, in the very beautiful hall, which is in the least pretentious, but it is architec-



THE CHASTE AND REFINED TREATMENT OF THE FIREPLACE IN LIVING ROOM.

ture in the true sense. Both hall and dining room are paneled in the whitewood up to the cornice, which is carried through all the rooms, its simple detailing, the fitting and chaste ornamentation. Beams, also of the whitewood, break across the long, though low ceilings of hall and dining room, with white plaster between. There is a simply paneled wainscot of

and the oriental rugs, with the cretonne hangings, furnish a sufficient relief to this cool and restrained treatment.

In the dining room, a cretonne panel of gay bright colored birds and blossoms on an ivory ground is introduced between the cornice and the tops of the openings. Antique mahogany is the logical and appropriate furniture selected for this per-



THE DINING ROOM—PANELED IN WHITEWOOD AND FURNISHED IN MAHOGANY.

the whitewood carried along the stair, and above this a grey paper striped with narrow lines of white. The simple open stair is capped with a mahogany rail and has mahogany treads.

The design of the living room mantel repeats the refinement and delicacy of the other detail, and the red brick facings are an admirable foil. We get a glimpse of the French doors opening out upon the porch, with their cretonne draperies. The walls are hung with grey grasscloth. The rich darkness of the quartered oak floors

fect setting. The lighting fixtures are extremely simple copies of simple wall sconces and are in complete harmony. The tall glass candlesticks and candelabra on the mantel pieces are specially delightful.

This indeed is an important function of the true architect, and is more and more coming to be so considered. The example before us is an instance of wise and discriminating choice, where furniture, hangings, walls, all compose harmoniously with the purely architectural detail.

The Cottage Type of House

By Henry K. Pearson



THE American public is at last coming to see the beauty and charm of the cottage type of house architecture. Not only is the man of small means no longer ashamed to live in a cottage-type of house, if he be a person of ideals and cultivation, he dotes upon low roofs and ceilings and casements. Where formerly the average builder or buyer must have a "full two story" house, a house dull and uninteresting and just like a thousand others—there is now a good proportion of intelligent and discriminating, appreciation of the artistic quality in house building and some encouragement to the architect to achieve it. The commonplace box-like structures of the real estate deal-

er and the "builder" no longer satisfy and our towns of city suburbs are beginning to show this change in ideas.

Fitness is a divine law—whenever applied. Why should a man with five or six thousand dollars to put into a home expect or even desire, to imitate on a small scale or as near as he can come to it, the \$20,000 house of his neighbor. Though for the matter of that, it is perhaps the rich or near-rich, who more often choose the cottage type for even extensive and expensive dwellings. For the beauty of the cottage type is that it is readily adapted to the small inexpensive home or to a dwelling unhampered by considerations of cost and rich in interest.

How skilfully the really artistic archi-



CHARMING COTTAGE ARCHITECTURE APPLIED TO A DUPLEX HOUSE.



FRONT VIEW OVERLOOKING LAKE HARRIET.

tect is shown in the first illustration, which gives to a dwelling arranged as a duplex, all the charm of a rural English cottage. The rare advantages of a rural landscape in the heart of the city were sympathetically considered in the treatment of the exterior which is a most unusual combination of artistic grace with utilitarian needs.

We present some photographs of recently constructed cottages, all of small, inexpensive dwellings, but each one interesting and out of the ordinary. We eliminate the bungalow house from this

group, for the bungalow is in a class by itself. Nevertheless three of these cottages are built in the land of bungalows, California, and cheek by jowl with them.

The second cottage dwelling shown is so recently finished that the shrubbery which will add so much to its charm, can be seen in the mind's eye only. Some progress has been made by the rapid growth of the Virginia Creeper on the plaster wall in softening the rather bare effect. For the site, though a fine, breezy knoll, overlooking one of Minneapolis' beautiful lakes, is bare of trees. The excellent lines of the design, the harmony of the grey plaster and white trim, the grouping of the openings, all unite for a unique and interesting exterior.

There is a charm about the very word "cottage," and our third example has this feeling in a marked degree. It is newly finished, therefore not yet endowed with its future setting of garden paths and greenery, which are yet to be. It is located in one of Pasadena's best residence districts, near by large grounds and stately dwellings. The cottage is frame, frankly and unabashed. It is not even "relieved" (?) by cobble stones or cement in the gables, but is purely white painted



Side View of Plaster Cottage.



CHARMING PASADENA COTTAGE, COLONIAL DESIGN.—SYLVESTER B. MARSTON, ARCHITECT.

siding, and it is charming. Neither is there a dormer let in to the broad expanse of the low, sheltering roof. But the floor plan shows how much space is covered by these apparently modest walls. The long living room and the dining room oc-



THE INTELLIGENT USE OF IVORY WHITE PAINT.



GREY SHINGLE COTTAGE IN PASADENA.

cupy the entire front of 35 ft. The photograph shows the quaint and charming "trim," the wide, Colonial mantle with red brick raked in white, the glass door opening into hall. The effective detail of small paned white sash in the bookcases each side the opening, repeated in the china cabinets of the built-in sideboard glimpsed through the opening. Through the dining room windows there is an outlook to the mountains. To this you add the delightful wall decorations—an all-over foliage tapestry in the softest of

grey and mauve shades on a white ground, in living room and in dining room a cloth, narrow, grey stripe as high as the china cupboards with rich dark hues of dull orange and dull red above. From a front view of exterior you would never dream there were two chambers opening each into two large sleeping porches, a bath and much storage space. These sleeping porches are unique; they look toward the mountains, and have shades which drop down from the top. The inside finish has received the same



OILED RED CEDAR SHINGLES COMBINED WITH BRICK.

care and nicety as the rest of the house ceiled and polished with waxed floors. The chambers are in truth but dressing room adjuncts to these sleeping porches. The kitchen is all white and has a novel feature in a built-in sloping hood of plaster, over the gas range, with an opening into the chimney where all odors and gases are drawn by the sloping hood. The drainboard of the sink is a composition of cement and wood fibre called Wood-stone, with a hard, smooth, undefaceable surface.

This cottage is a fine example of the intelligent use of ivory white paint, a treatment which in recent years is coming more and more into favor. While of course, the architectural style of a house must always be considered, ivory paint or an ivory trim will often lift a common place dwelling out of the ordinary. In this instance the whole color scheme has been carefully studied. The roof is stained a rich but quiet olive green. The shutters are green, a green which does not in the least clash with the bird's-eye

blue finish of the window frames and of the Colonial door frame. A brick walk up to the door, a high, white lattice, separating the back yard from the opposite rear are the completing touches of this pretty white cottage. The cost is about \$4,500. We have described this cottage in detail, for its interest of charm; but space will permit only brief mention of other examples. The long, low lines of the grey shingle cottage next shown, its Dutch gabled ends breaking the too great length of roof, is equally attractive. Here, the exterior is all wide shingle, stained a very light grey with roof stained a darker Oxford grey. The blinds are a soft green and the trim and many panel sash all white. The interior is finished with the same nicety and care.

Brick is again coming to its own in house building, and this brick and shingle cottage is a felicitous example of its use. Combined with oiled red cedar shingle and a brown stained roof with white trim, it lends just enough dignity to a small structure.

Furnishing the Porch

By Allison Collins

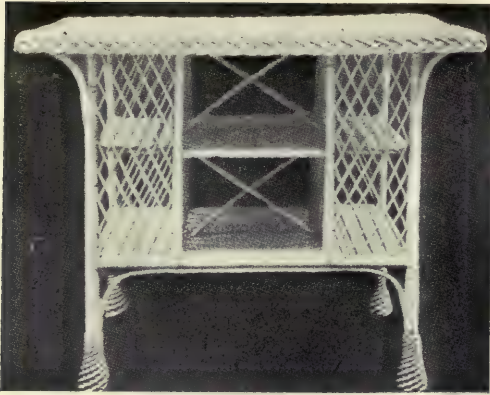


WITH the coming of warm weather we begin, those of us who have piazzas, to think about out-of-doors living, and it is a good thing to get the piazza furnishings ready, for when hot weather comes it often comes in a rush. I want to make a plea for the importance of harmonizing the piazza furnishings with the coloring of the house. You can do so much for the exterior of your house if you take a little pains. I have in mind yellow houses with Turkey red hammock cushions. I have seen a stone gray house with a blue rug and blue and white cotton crepe

cushions on white chairs, and this on the shady side of the house. And I have seen pink and white flowered cottons bleached into insignificance by the strong orange brown of creosote shingles.

The Porch Furnishings of the Yellow House

If you have been so unfortunate as to select a pumpkin yellow for your house, and you are not alone, the best thing to do is to stick to orange brown. Paint your chairs a warm brown, get a brown Crex rug for the floor, and cover your cushions with orange brown burlap. With long boxes of nasturtiums and an



Book and Magazine Table in Wicker.

awning in stripes of golden brown, you will have, if not exactly a cool color scheme, at least a restful one.

But if, on the other hand, your house is a pale yellow, choose green and white for your scheme, with an awning of pale green and white, olive green for your chairs and cushions of green and white cretonne. You can vary these with some of yellow and white glass towelling and others of gray green Japanese cotton crepe. And you will add greatly to the charm of your green and white scheme if you resolutely banish all but green and white from boxes and flower beds near the house.

For the Shaded Piazza

If the piazza is so well shaded that the sun never strike the furnishings, we have the opportunity of using a pink and gray scheme. We will have some of the same silver gray wicker furniture and other pieces of ivory white enamel, and if possible a cream white terra cotta or even plaster jardiniere with a foliage plant, perhaps a begonia with dark glossy leaves and pale pink flowers. Pink flowers shall fill the porch boxes and the electric light shall have a pink shade, while all our cushions shall be covered with pink and white materials; little pink roses on a white ground, pink and white striped cotton and pink mercerized material, heavily repped and edged with pink and white

gimp. And the finishing touch will be a tea service in solid pink, or else white with a border of quaint little roses.

Black Enamel and Blue and White

One of the excellent materials for cushion covers which is apt to be neglected is awning cloth. While some of the colors fade badly, others are practically indestructible, or fade so well as to improve with years. For a house with a covered piazza, needing no awning, and against a background of creosote shingles, cushions of blue and white awning cloth are charming, while bright black is a good choice for the furniture. For other pillows one can find an abundance of plain blue materials among cotton and linen dress goods, if blue denim does not tone in well with the blue of the awning cloth. The art denims of the upholstery department are never as satisfactory as the narrow width "blue jeans" sold at the domestic counter. In covering pillows with this "jeans," a strip will come off at one side, from which small pillows can be covered, by lacing the two strips together with a cord backing up the band of lacing with a strip of Turkey red. It ought not to be necessary to advise any one not to fin-



Tea Wagon in English Wicker.—Price \$20.00.

ish porch pillows with a frill, were it not that the shops are full of ruffled pillows. The best finish for any simple pillow is to turn in the pieces for each side an inch all round, stitching them together on the right side, about three-quarters of an inch from the edge.

As to the furniture itself, first, of

popular muffin stands, "curate's assistants" as the English call them, there are portable work tables supplied with a handle.

By no means cheap, but a most desirable possession, is the "l" oded chair, in which an old or delicate person is perfectly protected from sun and wind, while



THIS PORCH SHOWS THE PRETTY WILLOW TABLE.

course, there is the wicker or willow, which is so popular for all parts of the house.

Much of the willow furniture shown is intended for piazza use, and some pieces have been specially devised for use in narrow spaces, like the long, very narrow tables, with end pockets for papers, books or work. There are triangular tables, which fit into corners, and are sold in twos, to be fitted together to make a square table at need. Beside the always

enjoying the out-of-doors. Such a chair is often very useful in the house for the unfortunate individual who is susceptible to draughts. Then there are willow beds for the sleeping porch, which can be had in single or double width, and some very good looking willow window and porch boxes, which have the advantage of being much lighter than the wooden ones.

Lamps and Lamp Shades

Wicker lamps of various weights are fitted for either oil or electricity. They

have deep wicker shades which protect the flame efficiently when the lamp is used on a piazza, and some of these shades have openings at regular intervals, to diffuse the light, which are filled in with glass.

"Old Hickory" is a picturesque and substantial porch furniture. The new designs are in great variety and most attractive. A touch of interest is now given by introducing back pads and seat cushions of bright strong cretonne. We illustrate a porch furnished entirely in old hickory. For a lake cottage its rustic character is peculiarly adapted.

There is the woven grass furniture in green or brown coloring, which is about the price of wicker and less expensive than the willow. It is also more substantial than the wicker. One chooses, however, the English willow, which is very strong and durable, if one does not mind the extra cost.

A tea wagon is another chic and convenient porch furnishing. They may be had in wicker, costing \$15 to \$20, or in handsome mahogany pieces costing \$30. Of course the wicker ones would be the choice for porch use.

Porch meals are delightful, and where



With Cretonne Cushion and Back—For Bedroom.

there are only two or three persons the round wicker tables are charming. These can be had in a 42 in. top for \$13.50. Handsomer ones the same size cost \$18, but are made so the adorable low backed chairs to match can slip under the table. For larger number, the swing-top tables, ironing tables with a swinging top, that can be folded up against the wall when not in use, make a useful piece of porch furniture, and when stained and waxed are very good looking.

Until the present season it has



A PORCH AT MINNETONKA FURNISHED IN WICKER.

always been difficult to find those with circular tops, but such has been the demand for them in bungalows that they are regularly carried by the larger department stores. The smallest has a diameter of forty-two inches, and there are larger sizes. The circular ones are not so pretty when closed as the oblong

fibre mat, very thick and woven in two foot squares, which somehow reminds one of a knitted bedspread, and is exactly the color of a delicately browned biscuit. 4' 10" by 6' 6" costs \$15; 8' 2" by 13" is \$45. Such a rug would be as suitable for a bathroom as for a porch, and the same may be said of the oval rush mats, which



A SPACIOUS PORCH FURNISHED IN "OLD HICKORY."

ones, but are much better for dining tables, and specially adapted to apartment house use. The box in lower part carries comfortably the tablecloth or doilies and all the small silver used on the table. As they come in the natural wood they can be stained any desired color.

Porch Mats

The newest thing is a natural white

are now imported in many sizes. Their surface is not unlike that of a peanut hat, though heavier and they are made from roaswide braid sewed together after the fashion of a braided mat. Prices range from \$1.50 for the 27 inch length to \$11.50 for one 13' 9" long and proportionately wide.

NOTE.—We are indebted to the Old Hickory Chair Co. for one of the illustrations used in this article.

The Sleeping Porch—Built-in and Built-on

By Emma E. Beard



NOT so very many years ago an out-of-doors sleeping porch was something not only unheard of, but if suggested in polite society would have met with that blank stare which polite society uses at the suspicion of a new idea. Fortunately (at least, in

in the present generation? Even on the farm, where fresh air is supposed to be always on tap, the sleeping porch is now being slowly adopted in the houses of the more progressive farmers. The present university campaign through Minnesota has, as one of its features, the instruction



UNIQUE SLEEPING ROOM ON A LOS ANGELES BUNGALOW ROOF.

this case) there is a large preponderance of impolite society in the world. Doubtless some "rude" man, on his annual hunting trip, sinking to sleep at night on a sylvan bed of boughs, with only a bottle of essence of pennyroyal and a tent wall between him and the army of mosquitoes, said to himself: "By George! If I could only be free from these darned mosquitoes I'd sleep out of doors the year around!" Thus, between slaps at mosquitoes and snap shots of the stars in Heaven shining through primeval forests, did the sleeping porch idea evolve.

And to what lengths has it not gone

by experts as to the construction of the modern farm home. Who doubts but that the merits of the sleeping porch will be set forth from many sides?

For there are many points of view from which to consider the desirability of this new feature of health living in the home life. The health question comes first surely, for only a sound machine can do its best work regularly and vigorously each day; and to the machinery of the body fresh air is the first essential. A man's lungs must be well fed if he wants his breakfast to be well digested. And even a crying baby (a few families still



LOS ANGELES UPPER PORCH WITH GLIMPSE OF RECESSED BED THROUGH FRENCH DOORS.

have babies who cry) will not cry on the sleeping porch. The baby will sleep on the sleeping porch. We cannot begin too early to establish good habits in our children. Another argument for the sleeping porch is that it keeps us from mouth breathing.

Therefore, in spite of the physician—a St. Paul one—who declared to his patient that people have “gone daft over the open air sleeping idea. There’s nothing in it but hot air, for as soon as frost comes, it’s back to the furnace-heated rooms again”—in spite even of the truth of his last sentence, there is almost everything to be said for the sleeping porch from the hygienic side, and very little to be said against it.

Summing up the case for and against, it stands about this way:

Affirmative.—Pure air, better rest, more quiet, less housekeeping detail, better ventilation for the house in general where sleeping is done in the open; and

last, but not least, by extending the family habit of out-door sleeping into the winter months, the avoidance of many



The Recessed Bed with Shelves Above for Dressing.



SLEEPING PORCH ON INTEGRAL PART OF THE DESIGN.

contagious diseases that attack a whole community in the spring. All the above factors unite for the general well-being of the individual, and make him better able to resist those ills that flourish in our winter-tired and furnace-tired bodies.

Negative.—What is there against the sleeping porch, therefore?

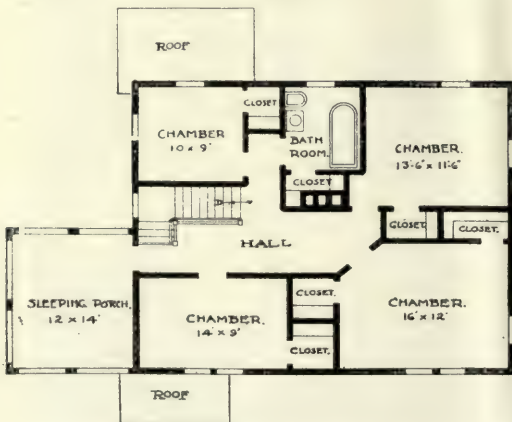
First: The personal element. There are those who declare they "cannot sleep out of doors." They try it for a short experiment, like it not, and abandon it. But these are hardly fair witnesses. The habits of a lifetime need some coaxing to make them accept a new harness. Unless one is really ill enough to be near the end of all things out-door life and all that can be gotten of it is the one specific above all others for nerves.

Second: The lack of privacy in the large and common sleeping porch.

Third: The expense.

These last two objections may be considered as one. For if expense is not an argument, the individual sleeping porch is as easily obtained as the private bath room. If cost must be considered closely, and the family is large, there are various methods by which the common sleeping porch may be made adaptable to the individual. The question seems to sift down, therefore, to the health vs. pocket-book case, and the popular query becomes not "Do we want a sleeping porch?" Rather: "Can we afford it?"

All over the country sleeping porches of every size and shape are being added to old houses, some of them under the plan and supervision of an architect, but many others crudely evolved from porches already built. That the "fad" has become a fixture in living today is shown in the advertising columns of the newspapers. The renting departments, the real estate columns, the boarding house offerings and inquiries recognize the sleeping porch as an essential. At one of the nearby smaller lakes a business-like, enterprising woman has added to her old but attractive lake boarding house four sleeping porches, attached to as many different rooms, and architecturally at-



Second Floor Plan Showing Sleeping Porch.

tached, too. She has undoubtedly counted the cost well, and knows the demands and supply of her market. There is an almost uniform inclusion of the sleeping porch in the plans of new homes. In the illustration given, accompanied by second floor plans, the sleeping porch is on an incorporated part, and it will at once be seen that this had been done without much, if any, sacrifice of lighting facilities for the interior bed rooms, or any loss of dignity in the architectural lines of the exteriors. The design shows a sleeping porch connected with two bed rooms at different angles of the house.

The arrangement of the sleeping balcony in the larger houses gives a satisfactory combination of a good and pleasing facade with a front sleeping porch, an effect sometimes aimed at, but not always gained. Such a porch, included at the outset, would add but little to the cost of construction, is easily heated, and capable of occupation the year round—three practical points that greatly commend it to favor.



Sleeping Porch Built Over Projecting Corner of Duplex Porch.



Outside Chimney Utilized for Part of Wall.

Another original, and in some respects, unusually convenient, plan for a day and sleeping porch combined may be seen by the two photographs of the porch of a Los Angeles house. Here the recessed bed affords convenience, easy adjustment to domestic needs, and economy of space.

And here is a unique roof porch, recalling old stories of the Spanish occupation of California in some of its lines; this also tops a Los Angeles bungalow. Sleeping here, between the Pacific's breezes and the Coast Range winds one would surely renew all one's "cells" of every description. On many a Minneapolis house of a construction within the past thirty years could be found third story balconies quite capable of better uses than the nightly prowls of the house cat, where one could sleep in company with the tree-tops and the stars.

We of this day are learning how to tack on an upper sleeping porch here, or a sun parlor there. We study the outside lines of our old houses if we are not planning to build a new one, and we consult our architect if any radical change of exterior is needed. And it is often a delightful surprise as to the artistic effect wrought at comparatively small expense by such exterior changes.



An Electric Blanket for Porch Sleepers.

The back lawn of a Minneapolis suburban home offered a good proof of this. Sitting there not long ago a full view of all the neighbor's back doors could be had. Six of these were in sight.

A large and two-storied combination of sleeping porch above and dining porch below was built on, each floor being skilfully joined to the older part by an apt use of entranced possibilities already at hand. On the lower floor, the dining room proper was entered from the outer dining porch through an illuminated window transformed into a door of the French window style. On the second floor, a smaller side sleeping porch of earlier construction was used as the entrance, thus throwing the two porches into one. In order to avoid the loss of light to the inner rooms fronting on the second floor of the porch a sky light was inserted in the porch roof with an adjustable shade drawn over it. The capacity and roominess of this porch have been secured at comparatively small expense.

Another excellent evidence of how a sleeping porch may change an inartistic home site into an entirely different structure is shown in a duplex whose rear adjoins the back yard above described. Here was a house of four stories with high basement, perched upon the top of

an abrupt slope. The sharp perpendicular of the whole effect of house and approaches was not pleasing. The owner decided to make several improvements one spring. Among these were two sleeping porches, one on each side of the front elevation. These were necessarily very small, the lot being narrow where the house was placed; but they were of just the right proportions to revolutionize the architectural effect. An outside chimney wall was used for part of the side wall of one porch, with good result. The other was built over a projecting corner of the first floor porch, and a window from the bedroom adjoining opened to the floor with long French doors. In neither case was there any light lost from upper rooms, and the whole result has been most artistic from the front view. On account of the trees only side views can be shown in the two exterior photographs.

The two greatest objections to the addition of sleeping porches after construction are: the interference with second story light, and the extra expense involved if heating arrangements are contemplated. The two houses mentioned here show how the light question was met. As to the "hot air" feature if sleeping bags, extra coverings and hot water bags fail, the chilly occupant of a sleeping porch at 20 degrees below temperature, might try the electric blanket. Covered with a light woollen blanket to keep in the heat it is said to raise the temperature of the bed to comfort by turning on the current about 15 minutes before going to bed.

In some cases, an extra hot water radiator can easily be added of sufficient heat value to keep a bed warm, if placed near the foot, or under the foot of the bed. However, unless in exceptional cases, the cold air treatment during sleep is one that induces rather than depletes vigor. There are many people now who have proved this even through a Minnesota winter.



THE BUILT-IN BOOKCASES.

The Built-in Bookcases of An Amateur



Y husband's ability with saw, hammer and foot-rule furnished our living room with music cabinet and bookcases at a trifling expense.

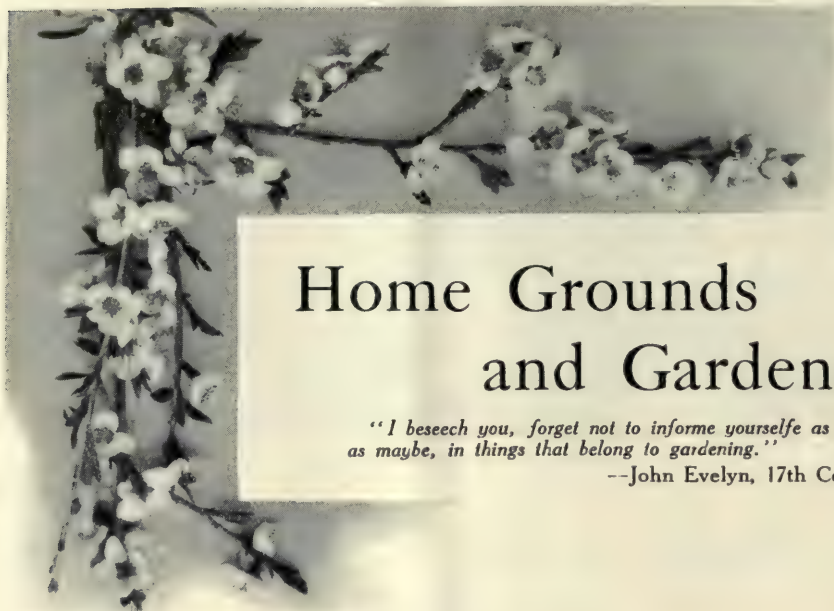
Beneath the shelves in the cuts given are broad shallow drawers, most convenient storing places for photographs, loose pictures, booklets and portfolios. Since cases were made for books and not the books for the cases the space between

shelves depended on the height of the books to be accommodated.

The cases have no backs, but are nailed to the wall and the plaster painted to match. The woodwork of the room being fir, the cases were made of the same material. Flemish oak stain and wax finish were used throughout. The top of the cases is a safe and attractive place for bric-a-brac—the children are in no danger of knocking it off. —*By M. P. W.*



ANOTHER VIEW SHOWING CORNER SHELVES.



Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

--John Evelyn, 17th Century.

Flower Garden Work in August

By Tarkington Baker



UGUST is another month of preparation. This does not mean, of course, that the cultivation of beds and borders already established should be neglected. On the contrary, if good results are to be expected next year, cultivation must go forward without check during August and September. But, in August, many perennials, aside from those of the bulbous sections, may be planted successfully. And wherever this is possible, it is well to attend to the work and have it over with before the approach of the busier days of the fall season.

The *Doronicums* may be safely planted in August. Among these, the best known, perhaps, is *D. Caucasium*, with its large, bright yellow flowers, $3\frac{1}{2}$ inches across, borne on long stems. It is commonly known as Leopard Bane.

The *Campanulas*, in all their numerous

varieties, succeed fairly well when transplanted late in August. An attractive grouping of these plants makes a sight long to be remembered. They vary in color and in heights, are graceful, free-flowering, healthy, vigorous and easily grown. *C. carpatica*, the Carpathian harebell, bears a little blue blossom on low-growing stems against a background of close, compact, dwarf foliage that hugs the ground closely and completely covers it. The little tufts are only eight or ten inches high and the flowers are produced in June and July. The true Canterbury bell is *C. medium*. It is a biennial, and catalogs should distinctly state this fact to avoid disappointment on the part of the purchaser.

Foxgloves bear transplanting in August. Dignified, beautiful, old-fashioned plants, they lend charm and stateliness wherever they are established. *Digitalis*

purpurea is the biennial form. It has been improved by hybridizers and a beautiful strain of plants, bearing gloxinia-like flowers, in white, purple, lilac and rose tints, are to be had.

No garden, to my notion, is complete without an extensive collection of German Irises. Always attractive in foliage, their flowers are truly the "poor man's orchids," magnificent yet dainty, showy yet retiring, some of them held aloft on

erect dwarf Iris, may also be planted in August. The hybrids of these are Cyanea, Eburna, Florida and Formosa, and all should find a place in the garden. The dwarfs make a splendid low edging for a border, attractive both in flower and foliage.

I have been asked to name the best perennials. I hesitate to do a thing as rash, for the person who links himself to a choice of this kind bitterly regrets.



GARDEN WALK WITH BORDER OF JAPANESE IRIS.

long stems, others nestled in the tuft of green foliage. The Japanese Irises, *I. Kaempferi*, are more gorgeous, but if I could have only one I should take the *I. Germanica* without hesitation. As beautiful as its flowers are, it will grow almost anywhere, increase year after year, hold its color, show no tendency to reversion and withstand neglect that would kill the Japanese in a week. Every new variety of *I. Germanica* that the hybridizers produce finds its way as quickly as possible into my own garden and—stays there; which is a great deal more than I can say of many other plants so confidently offered by their creators.

Iris pumila, the beautiful, early-flow-

However, without the following my own garden would be bare:

Peonia, single and double and the "tree" peonias.

Iris in variety.

Phlox in variety.

Hemerocallis in variety.

Papaver Orientale in variety.

Anemone Japonica in variety.

Trollius in variety.

Campanula in variety.

Aconitum in variety.

Funkia in variety.

Rudbeckia in variety.

If only seven shrubs were planted, it would be possible to maintain a succession of bloom, the first appearing imme-

diately after the last frost in spring and continuing until autumn frosts blight the bushes. This list would include:

Forsythia, April; Syringa (lilac), May; Spiraea, June; Deutzia, July; Rhus (smoke-bush), August; Hydrangea, September; Hamamelis (witch-hazel), October.

All these shrubs are perfectly hardy

The Gardener's Calendar for August.

Prepare beds for Peonies.

Plant as many perennials as possible; but be careful to lift only those that may be disturbed this month without damage.

Continue cultivation. The success of next season's beds and borders depends much on the August and September cultivation.



THE DORONICUM OR LEOPARD'S BANE.

and will respond graciously to ordinary treatment in any good garden soil.

The double blue cornflower is best started in August.

Sow the seed, the middle of August, where they are to bloom; and quite thickly, to insure a good stand. After they are well started, thin to four inches apart. In the fall, cover the base of the plants with fine litter, or leaves. It is best to place brush over this, to keep it in place. In the spring, thin to stand fifteen inches each way. This gives the plants a good start, and they will pay for the extra trouble, as, they bloom much better before the hot summer months.

Order the hardy bulbs.

Make up lists of shrubs, vines, trees and perennials to be planted this autumn.

Keep the plants free of withering blossoms.

See that there is a goodly supply of manure or other fertilizer on hand for use in making new beds.

Plant Evergreens. Make sure that no fresh manure comes in contact with the roots. Do not expose the roots to sun or wind. After planting, for four or five days, keep the evergreens covered with cheese-cloth or paper, to prevent evaporation before the roots take hold in the new quarters.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 438 JOHN HENRY NEWSON, Cleveland, Ohio

B 439 E. E. ROBERTS, Oak Park, Ill.

B 440 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 444 OLIVER M. WIARD, New Britain, Conn.

Design No.

B 441 BUNGALOWCRAFT CO., Los Angeles, Cal.

B 442 KEITH'S ARCHITECTURAL SERVICE, Minneapolis

B 443 A. C. CLAUSEN, Minneapolis, Minn.

Design B438.



TYPICAL English cottage modernized. Large chimney with casement windows lends character to the exterior. This is enhanced by the use of extra wide lap siding stained brown, with roof of black slate.

Considering size and cost of house amount of room given is extraordinary. The living room has large fireplace set in a tiled nook, with a seat at either end. The stairs have direct access from the kitchen as well as the living room. A French window in the rear of the living room opens upon the garden. This is a room one would scarce expect to find in a cottage of this size.

The high, steep roof admits of three large bedrooms with many closets. Without basement or heating plant this cottage could be built for \$2,000. If basement and heat as well as plumbing are included the cost would be from \$3,000 to \$3,500, according to kind and quality of materials used and varying cost of labor.

Design B439.

This is quite a pretentious design with brick for the first story, cement plaster above with timbers in the gables.

The timbers and brackets underneath the gable which has been slightly projected are used with very good effect.

The main entrance is in the center formed by the projected porch and the recessing of front wall of the reception hall. The sun porch or living porch is on the side reached from the living room

through French doors. Off the living room is a fair sized library with built-in bookcases. The dining room has beam ceiling and large built-in buffet.

The kitchen, pantry and entry accommodations are very complete.

There is a toilet on the landing under the main stair.

On the second floor are five well arranged bedrooms all provided with ample closet space, large bath with tile floor and a linen closet.

There are two large balconies providing space for the airing of bedding. A good stair leads up over the main stair to a large well-lighted attic where two servants' rooms and toilet as well as a child's play room has been finished off.

There is a full basement with furnace room, laundry room and vegetable room and storage space. The foundation walls are of concrete and the roof of shingles. The principal rooms of the first floor are finished in red oak with red oak floors, the kitchen in yellow pine with maple floor.

The floors on the second floor are birch with white enamel finish and birch doors stained mahogany.

It is estimated that this house can be built complete, including heating, plumbing and wiring, for \$12,000. Size over all, 32x68.

Design B440.

This plain colonial design is for a home that has a frontage of 34 feet and a depth of 32 feet, exclusive of the side and rear

porches. The entrance is in the center of the broad front with porch and vestibule opening into a main living room that is 15 feet by 20 feet, with a central staircase leading up from the living room to the second story. At the left is the library 12x16 feet connected with wide opening. The living room and library both have wide, open fireplaces with projected chimney on each side of the house, carried up symmetrically through the gables.

The roof shows its broad front to the street with a gable at each end; it is medium low pitched and has two circle top dormer windows in the front lighting the attic, that is also lighted with windows in each gable. The stories are low, being eight feet six inches and eight feet, and the first floor two feet above the grade level. The main cornice is brought down low over the second story windows with a two feet overhang.

The exterior of the house is designed to be covered with long shingles and stained brown, and all of the casings, cornices, etc., painted white, and the windows have outside blinds, also painted white, the roof is shingled and stained brown. The main piazza is at the right and is ten feet in width and connects with the living and dining room by large French windows. The small entrance porch has a seat on either side.

This house is thoroughly well built, plainly finished in colonial style, and is estimated to cost \$4,500 exclusive of heating, plumbing and electric work. The interior is finished on the main floor in white enamel with mahogany stained doors. The railing to the stairs, newels and treads are to be stained mahogany, the floor is oak, in natural color. The second story is to be enameled white throughout with a red birch floor. The attic story has ample space, but finished rooms are not included in this estimate. The chimneys are intended to be built of a dark vitrified brick and to show on the

outside, also the front platform built in the same manner.

Design B441.

This design of bungalow is always popular, as it has a taking exterior and a very convenient room arrangement; moreover, it is of a shape which may be made of almost any desired size and expanded in either width or length. The exterior is all of wood; either weatherboards or shingles will look well, and the front gable may be of cement stucco, with exposed half timbers if preferred. As recently built in Los Angeles, it cost \$1,500 with pine floors finished and varnished in the living room and dining room.

A cellar under the rear half of the house with furnace, using a flue in the fireplace chimney, will add perhaps \$300 to the cost, but as a stove can be placed in the dining room, with the kitchen range and living room fireplace, should heat the whole house in any not too severe climate. The exterior of the house may be either painted or stained and the inside woodwork is to be stained and finished in shellac and wax, except in the bedrooms and bathroom in which the trim is enameled white or any desired tint. The room arrangements could not well be improved upon and the closet room is ample.

The dining room has a paneled wainscoting with plate shelf and a built-in buffet of pleasing, but not expensive design, which opens through into the kitchen. There is a cozy seat beside the broad open fireplace, which is an attractive feature. The kitchen is made in full buffet style, with cupboards, closets, bins, cooling closet, etc., all arranged just where they will be handiest.

Design B442.

Another English design of frame construction with cement plaster over metal lath with a rich oriental brick up to the first story sills and timber work in the



John Henry Newson, Architect.

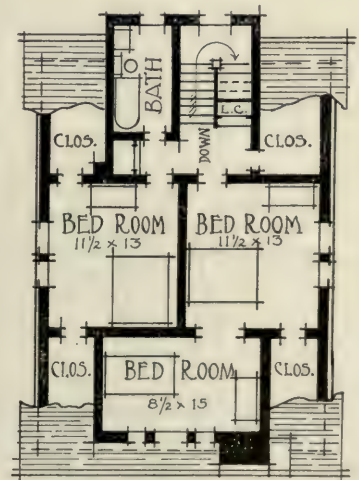
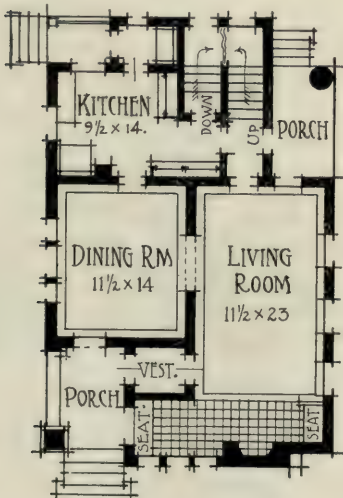
DESIGN B 438

A Modernized English Cottage

gable, a deep red stained shingle roof makes a very pleasing combination for this design which possesses many unique features.

The front porch extends across the entire front and is partly roofed by extending the second story in order to provide for sleeping porch accommodations. With this simple treatment the first story

porch could be fitted with sash thus providing an ideal sun porch, if this were done the vestibule could be omitted and the space taken up by the hall could be thrown into the living room. This would give a beautiful room for entertaining 16x33 with about four feet taken out for the stairway. This room has a large open fireplace, with a built-in bookcase





DESIGN B 439

E. E. Roberts, Architect.

A Brick and Plaster House with Timbered Gables

and a wide recess with windows above providing space for a large settee or piano.

Just back of the living room is a dining room 14x16 with a built-in buffet. This room has paneled wainscot, plate rail and coved ceiling.

Beside the built-in cupboards in the kitchen there is a pantry with built-in cupboards, work table, place for flour bins, table leaves, etc.

A combination stairway leads to the second floor. On this floor is a large owner's chamber across the front 12x21

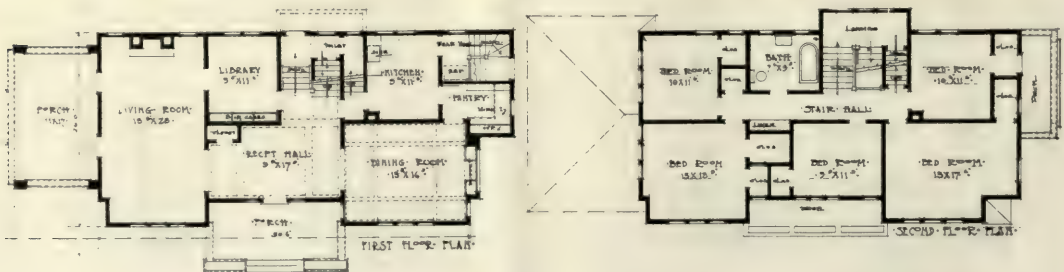
with a dressing room at the end which contains a large built-in wardrobe, recess lavatory. A French door leads from this room onto sleeping porch.

Two more chambers each with a large closet, a large bath, hall and linen closet are to be found on this floor.

A separate stair leads to a large well-lighted attic where two servants' rooms and a bath has been finished off.

There is a full plastered basement with heating plant, fuel, fruit and vegetable rooms, laundry and dry rooms.

In the rear adjoining the house is a





DESIGN B 440

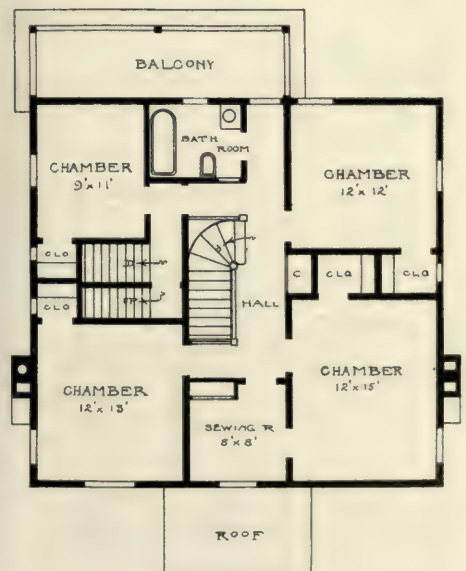
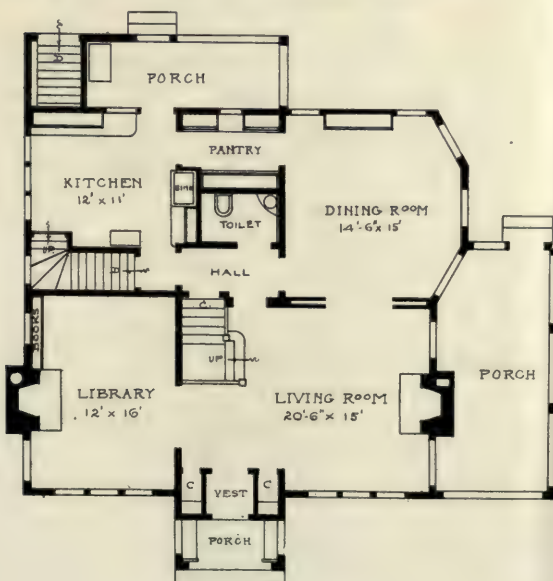
Chas. S. Sedgwick, Architect.

Colonial Design Treated in Old-Time Large Shingles

garage large enough to house two cars. Access to this garage is up the stairs to the rear porch. This porch being covered enables the occupants to reach the

garage without going outside in disagreeable weather. This feature alone is worth considering.

The finish for the living room, hall and





DESIGN B 441

Bungalowcraft Co., Architects.

A Popular California Bungalow

dining room is of white quartered sawed oak stained a dark fumed, with oak floors. The kitchen and pantry are finished in pine with maple floors and imitation tile wainscot.

The second floor is finished in birch for white enamel work, the doors being stained mahogany with birch floors, while the floors for the vestibule and bath are tiles with tile wainscot for the bath.

The third floor is finished in pine with pine floors.

The size over all, including garage, is 34x61.

It is estimated that this home can be

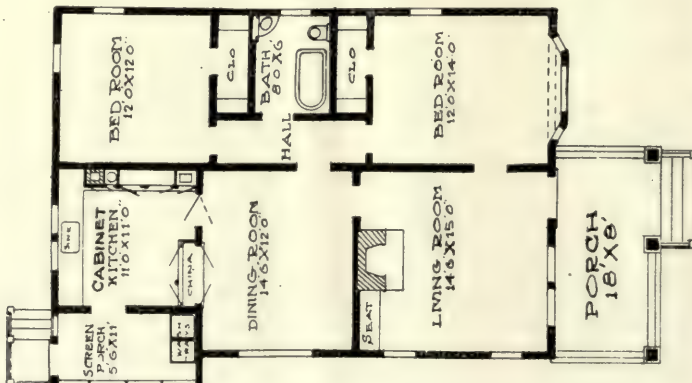
built complete as described, including heating, plumbing and wiring, for \$10,000.

Design B443.

Another frame design with plaster exterior. House has full basement, laundry, fruit and vegetable rooms. Storage space, hot water heating plant.

Note large amount of porch space, approximately eighty feet of covered porch and twenty of open terrace.

First floor finished in oak, second floor in unselected birch with hardwood floors throughout. Concrete foundation with stone above grade and for terrace. Estimated to cost \$7,500. Good attic space.

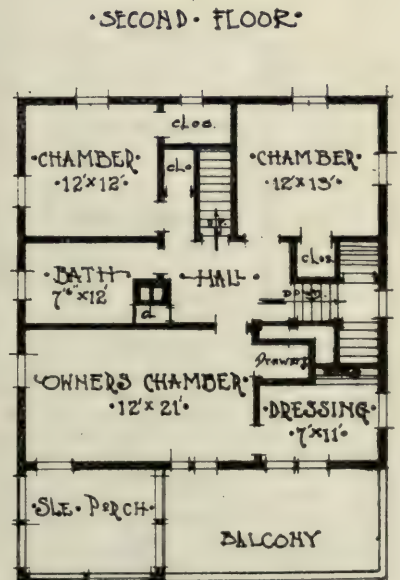
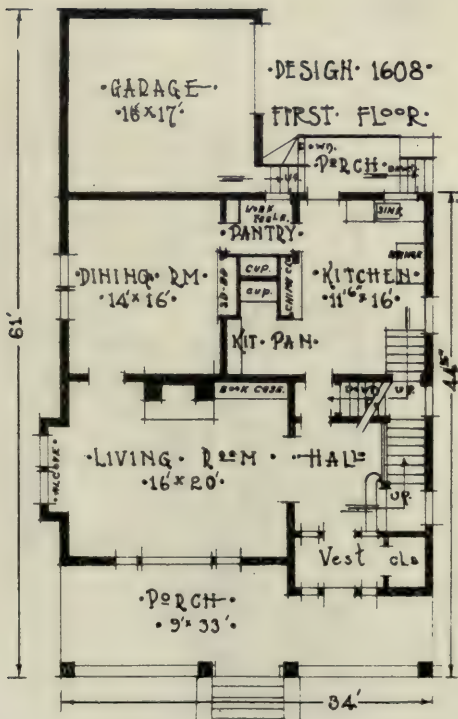




Keith's Architectural Co., Architects.

DESIGN B 442

Many-Paned, Mullioned Windows and Timbered Gables

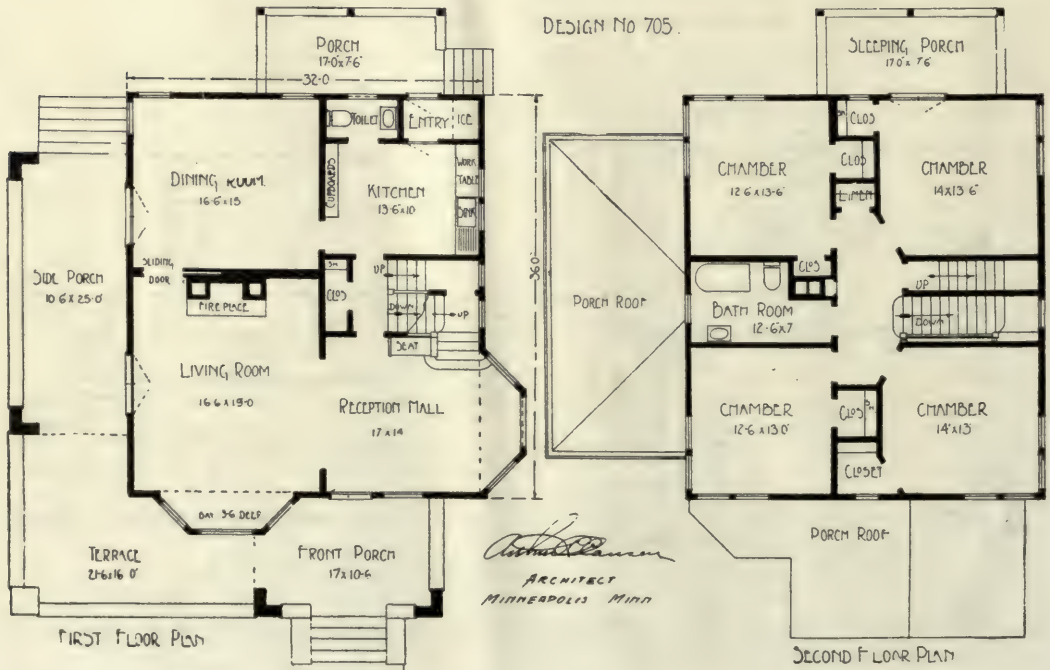




DESIGN B 443

A. C. Clausen, Architect.

A Frame House with Stucco Exterior





Courtesy Nat'l Fireproofing Co.

Oliver M. Wiard, Architect.

DESIGN B 444

Quaint Cottage Design in Natco Hollow Tile

Design B444.

While this house has the appealing charm of the quaint cottage type of design, it is by no means an insignificant dwelling. It spreads two wings wide, with a great chimney in each wing. The rear view is here shown with veranda opening upon the garden and is equally attractive as the front.

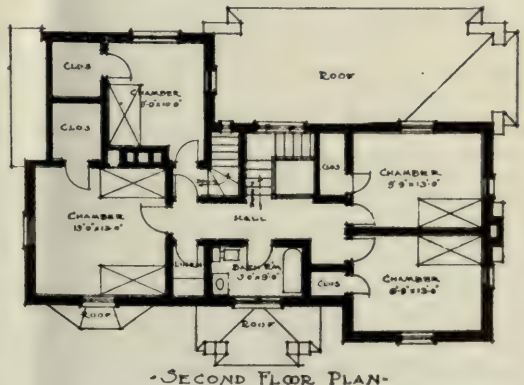
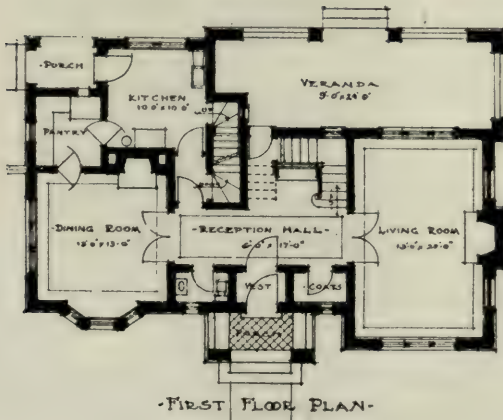
The floor plan shows excellent planning, and a most effective arrangement of open stair in the rear of the wide entrance hall, with spacious living rooms

are grouped around it.

The foundation walls are of poured concrete; the walls above of Natco Hollow Tile, coated with rough cast cement. The roof is shingle stained grey. The shutters are grey and the window sash white.

The cost of this house is \$6,000, and includes a full basement with hot water heat, open plumbing, oak finish and oak floors in first story. Tiled bath, etc.

All the chambers are large and there is no feeling at all of cramped space.





Conducted by **ELEANOR ALLISON CUMMINS**, Decorator, Brooklyn, N. Y.



N combining a plain colored material with cretonne, it is rather important to choose a material of about the same weight. And the tone of color chosen should be lighter than the cretonne, except when one of the tones of the design is chosen. A cretonne combining blue and green may be used with either blue or green, but the average flowered cretonne is better with either cream or gray. Seeded cotton or jute taffeta is a good material, so are unbleached and gray dress linens. Many of the mercerized cotton fabrics are good, particularly panama cloth, although it is not always to be had. Mercerized poplins can be had in a good many colors, and for designs in tones of brown, orange and yellow a gray Russia crash is good. There are also plain colored art tickings, and some rather good shades of blue in galatea. For a room in which a blue and white or green and white cretonne or chintz is used, the Austrian cotton table covers and bedspreads, with a stencilled design of white on a blue or green ground, often give a pleasant accent to the color scheme.

Cottons in Cubist Designs.

An aftermath of the futurist exhibition are some of the cretonnes and printed linens in geometrical design, in flat and extremely vivid colors, a bright magenta and a crude blue being popular. For sheer ugliness they excel anything ever seen before, and it is difficult to conceive of them in actual use. In fact, very many of the new textiles are hardly beautiful. The printed linens, which until quite lately have been rather exclusive in use and design, have become commercialized and many of them are crude in color and commonplace in pattern. In the shops of decorators who do their own buying abroad

one finds designs of great distinction, well worth the additional fifty or seventy-five cents a yard asked for them.

From Fontainebleau.

As an illustration of the unusual things to be had at such shops is a cretonne shown at one of them, an exact reproduction of the brocade which covered the walls of the bedroom of Marie Antoinette at Fontainebleau. The design is an elaborate one of bluish green leaves and salmon red flowers on a deep cream colored ground, the pattern forming a sort of diamond-shaped lattice, and a photograph of the room at Fontainebleau is shown, in which one can trace the pattern on one of the walls. Sixty-eight inches wide, the material costs twelve dollars a yard.

Blue and White.

French printed linens have a grayish white ground with designs in an exquisite old blue, the patterns suggested by old brocades, each piece a work of art, so beautiful is the design and color and so accurately done the block printing. Toile jaspé, shadow cretonne, as it is sometimes called, is to be had in the usual cream colored grounds with great bunches of blurred, pastel toned flowers, and also in designs of the same character, but with a ground of old blue, the grayish tone called Louis Quinze. Some of the more expensive linens and cretonnes are exact copies of old crewel work, and are specially suitable for use with oak furniture in the English styles of the seventeenth century. The stitches of the design and the texture of the old crewels are accurately copied.

Sun-fast Fabrics.

While a large proportion of the sun-fast materials are intended for window

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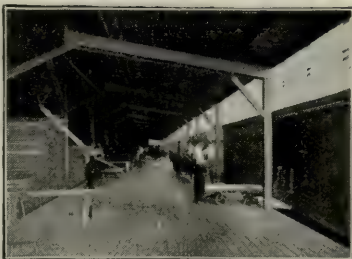
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curtains, and are light in weight and more or less transparent, there is quite a variety of weaves heavy enough for portières or even for summer upholstery. Shikii rep, suggested by the irregular weaves of Japanese raw silks, comes in rose red, old blue, green and a changeable mixture of green and golden brown, the latter falling in with either a green or a brown scheme of coloring, and costs \$1.35 a yard, fifty inches wide. Another sort has a shadowy figure on a plain ground in rose, green or blue, at \$1.50, and sun-fast satin in a variety of colors costs the same and has the effect of a plain surfaced wool damask.

The blues and greens in the sun-fast fabrics are specially good, much better than the browns. The thinner weaves used for window curtains range in price from sixty-five cents for the yard width to ninety-eight for those fifty inches wide, and need no finish but a plain hem. There is also a variety of patterned curtains in pairs, in nine and seven-and-a-half-foot lengths, in which the pattern is made in the same way as in Madras muslin. It is probable that it would pull apart in the same way that Madras does. Generally speaking, a fabric which is woven from threads of differing thickness is less durable than one in which warp and woof threads are of the same size.

Wood Finishes in Summer Furniture.

In distinctively summer furniture, both wicker and wood, one notes a great deal of the natural color, the light yellow tone of ripe corn. Natural willow is much in evidence, and there is a good deal of green and brown, the latter a medium tone, nut brown rather than fumed. The green is a soft tone, a medium olive.

Very new indeed is gray ash furniture, very highly polished, a gray with the yellow of the wood showing through it. It is made in tables and chairs and possibly sideboards for country house dining rooms. The tables are on the gate-legged order, round, and cost forty-one dollars. Arm chairs are \$12.75, with or without rockers, and swing-top settle tables are thirteen dollars. As the original wood is not expensive, a fall in price may be looked for in another season. In the meantime, there is a good deal of ash

furniture in existence (and ash is a very durable wood), which might be stripped of its varnish and stained, with happy results.

Cottage Rugs.

There is a great variety of low priced rugs, fibre prairie grass, art squares and the like, which are too well known to need description. When the condition of a floor makes its covering necessary a straw matting of good quality is far preferable and more durable, especially if it is bought in a standard pattern, and can be matched when repairs are needed.

Of really cheap rugs, those woven of rags are durable, artistic and unpretentious. Any large department store will have them woven to order in any desired coloring at an average rate of seventy-five cents a square yard. The objection to those kept in stock is that they are generally very light colored, being woven with a white warp, but they are excellent for bedrooms, and the medium green, tan colored and brown ones answer very well for a country house living room of modest pretensions. The best ones are woven of rags of plain color, with a border at the ends of plain white stripes. The hit-or-miss pattern is well enough for a bath room or nursery, but not to be recommended for other rooms.

Scotch Art Rugs.

These are sometimes called Morris rugs, and are woven of heavy wool, after the fashion of an ingrain carpet, but are fully twice as thick. Most of them have plain centers, with a rather narrow border of simple design of the self-tone and white, or of two shades of the ground color. Some have merely a plain border of a darker tone. Others have floral designs in delicate colors, copied from Savonnerie carpets and from English chintzes. They are made of wool of the best quality, absolutely pure, dyed with vegetable dyes, and are very durable. Prices range from \$22.50 for a 6x9 rug, to seventy-five dollars for the 12x15 size.

The American copy is a durable rug, not quite so heavy, and the best looking ones are those in two tones of color, with a plain border. Prices, as given by the firm which controls the Scotch rugs in New York, range from \$15.00 to \$37.50.

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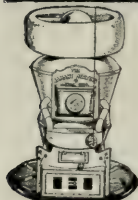
of this house is a delightfully airy porch in summer for it is completely enclosed with

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ANSWERS TO QUESTIONS ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert. Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

A Sun Parlor Dilemma.

F. H.—“Enclosed find a drawing of my sun parlor. This is above my porte-cochere and they have finished the ceiling as they did the long colonial porch in front and also the porte-cochere.” Now the porch and this roof is pine natural and beading of poplar painted white.

“Will you please help me in painting sun parlor? What color for ceiling and what stain for floor and side wall, as it is only such a small space between the windows? I had thought of a green or gray, but hardly know how to arrange the ceiling, as this of course joins the wall of the house on that side. The house wall is red brick with red mortar and the door and window are white.”

Ans.—Replying to your recent inquiry, would say that inasmuch as the red brick with white woodwork forms one wall of the sun parlor, it must be worked into the treatment of the room. The wood styles between glass of front should be painted white, also the bead around the panels below. The panels themselves may be stained with a red mahogany stain, but the ceiling panels kept in the natural finish like the other ceilings, with the white strips.

The floor can be painted or stained a dark green and have a greyish green rug. One of the Doone rugs having a plain center of this grey-green, with border introducing dull red, would be excellent.

The furniture should be natural wicker, upholstered in an English print in strong greens and reds on a light ground, but the pattern almost completely covering the ground.

Early English and Built-in Sideboards.

O. W. W.—I am sending you a diagram of the floor plan of our house which

we are building, and ask for a few suggestions.

Our dining room is to be furnished with Early English and we expect to have the woodwork of this finished in Early English. The woodwork of the rooms, except the kitchen, is of red oak. What would you advise for the finish of the woodwork for the other living rooms and staircase. Do you think the Early English would be too dark for the staircase?

In regard to the walls, I would like to have the dining room at least painted or frescoed. What would be best for the living room, hall, etc. There are so many windows in the front of the house, the wall space will be somewhat limited.

Do you consider a built-in sideboard as desirable as the separate ones. I mean one of the good ones made at the mill-work factory with plate glass.

Ans.—Referring first to the dining room in English Oak, we think a color scheme introducing brownish yellows and old blue would be excellent with this dark woodwork and furniture and west facing. Since you wish to finish these walls in oil paint, we would send for a scheme printed by a well known decorating firm called, A Modern Flemish Dining Room, which we think would be admirable for your dining room. Full directions are given of what to get and how to use it.

As to the merits of built-in sideboards, if well designed, not too fussy or elaborate, they are always correct. It is entirely a matter of taste and convenience. If one possesses a good sideboard then use it. The built-in features are popular in Craftsman style houses.

We think the English oak on red oak, too dark for the other rooms. We would advise a lighter brown stain for the remainder of the woodwork. Since the



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takes the place of unsanitary wall paper and various mixtures which possess no artistic value or durability.

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front rooms are practically one, the same wall treatment should be used in both and nothing could be better than a Tiffany Blend paper in greys with a hint of green. With this we would use plain Saxony rugs having centers of Leichen green with darker shades in border. The stair hall could be tinted grey or the same paper used. In the library we would use rug and draperies in the beautiful mulberry tones now so much liked, with a warm putty grey wall. This gamut of grey wall tones relieved by color in furnishings will give an effect of distinction to the house. Samples of stains, wall papers and draperies advised, with fuller details and prices, are furnished for 50 cents a room. In this case mention any furnishings already on hand desired to use.

Finish of Walls and Woodwork.

M. F. F.—“Will you please give me some suggestions on the enclosed plan of our new house nearing completion. House faces north. We have planned to finish living and dining rooms in oak with beamed ceilings and square columns in the openings. Are round pillars allowable with beams? Kindly suggest a color scheme for the walls. We wish to tint them. There will be a plate-rail in dining room. Our furniture is quarter-sawed oak. What finish should the woodwork be given?”

Ans.—The columns in the openings should be square. The opening from living room into hall is the only suitable place for columns. The library opening should be merely a square arch with draperies and there should be sliding doors between living and dining rooms. In case of birch with mahogany finish in library, the break would come on the library side of opening. A very successful mahogany finish can be given to birch by using the dark mahogany stain and not the bright red. The woodwork on remainder of floor would best be finished with a fumed brown oak stain.

Inasmuch as these rooms have north-east and west exposures and are so widely thrown together, we would use on walls of hall and living room a soft ecru tint with shade lighter on ceiling carried on to upper hall walls. Living room ceiling cream. Dining room wall below plate

shelf a golden brown with pale ecru above and a stencil or paper-frieze decoration at top of brown and yellow leaves. At the dining and living room windows the curtains of filet lace mentioned would be suitable and as these rooms face the same, it would be well to curtain alike. The net should be deep cream or ecru and the finishing edge should extend across bottom and up inner edge. The rugs in both these rooms should be the same and they may either be in brown tones or a contrasting harmony of dull but light green center with darker green border. If the latter, the green must be carefully chosen and should be carried into some of the other furnishings.

A sort of amber terra cotta would be an excellent choice for library wall with a rug in the same tones. If birch is used on second floor, it should be finished natural. It would then be in good harmony with the birdseye maple furniture.

Ivory Woodwork and Oak Furniture.

E. R. P.—Will you please advise me in regard to enclosed rough sketch of cottage? The house faces the east. Inside finish is yellow pine. I should like woodwork in entire house painted an ivory white. Would the walls of livingroom, then, be suitable done in buff or light tan, with ivory ceiling? The furniture for entire house is quartered oak.

The dining room which opens into living room I should like in green (not bright) with ivory ceiling. Will the two rooms harmonize if I introduce a touch of green with tan and brown in the living room rug?

What kind of curtains and rug would you advise for dining room? Had thought of white scrim for curtains.

Ans.—With regard to the interior treatment of your cottage, we are sorry to say that while extremely partial to an ivory finish for soft woodwork, we cannot advise it with quartered oak furniture. With walnut or mahogany it would be delightful, but it does not “go” with oak in the usual weathered or mission finish. It is advised to use a soft brown stain on living and dining room woodwork and small hall. If the bedroom furniture is also oak, then we would paint the woodwork a very deep cream.



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Summer Simplification.

THERE is no time of the year when simplicity in one's domestic arrangements is more desirable than in the summer. Except in the case of unusual climatic conditions and of exceptional people the season makes great demands upon the whole bodily economy. Appetite is apt to flag, sleep is often broken; extreme fatigue follows almost any sort of physical exertion. Perhaps the people who are tied to the city are not so badly off, after all. They at least are free from the yoke of public opinion, and can take things as easily as they like, while the dwellers in the smart suburb or the semi-rural community are in constant competition with others more ambitious than themselves.

What is needed in every small community is one woman of assured social position who will steadfastly contend for simplicity. In housekeeping, as in clothes, it is quite possible to achieve a smart simplicity. The secret is to do a few things and do them perfectly, just as the secret of the gown which is a masterpiece of style is the absolute perfection of its cut and finish, although it may be absolutely devoid of ornament. The housekeeping of most women is to be compared to the elaborate gown whose fussy trimming conceals piecings and stains.

Evidently the woman of small means is not the person who can inaugurate reforms. Her motive is sure to be suspected, and she is voted mean when she is trying to be sensible. But the woman who is already a leader can do as she will and carry her following with her.

Summer is a specially good season for the inauguration of social reforms, because a certain informality is inseparable from it. The dinner party, which is supposed to be the last fortress of the socially elect, is seldom given, and other entertaining falls without the pale of the rigid rules which govern the last meal of the day.

While there is a good deal to be said in favor of the late dinner, I am inclined to think that for the average family, during the hot months of the year, the mid-day meal is the better arrangement. It makes a very simple and informal supper possible, and leaves the pleasantest hours of the day comparatively free from work and worry. It is clear gain if the head of the house is forced to stop long enough in the middle of the day to eat a leisurely dinner. But if the night dinner is a necessity, at least it may be made as easy as possible. Eliminate potatoes and made gravies. Serve a single cooked vegetable with the meat and have a salad, which can be prepared in the early part of the day; crackers, cheese, coffee and fruit, with a plenty of good bread, and no one need complain, while the time needed for the preparation of such a dinner is very limited. If a Puritan conscience permits the stacking of the dishes to be washed in the cool of the next morning, so much the better for the mistress and maid, or for the mistress without a maid.

The wave of reform has already struck the breakfast table, but luncheon is in need of revision. Isn't it rather a horrid meal in most houses? All of the odds and ends left over from other meals are gathered together, and there is generally an



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FACTORY

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altercation as to who shall eat which fragment. Until the American housewife learns that it is not beneath her dignity to market so intelligently that she has no left-overs of any consequence, luncheon will continue to be a poor thing.

The cult of the soup kettle would go far to improve the average luncheon. A good soup with plenty of bread and butter is an admirable luncheon, palatable and satisfying, and far better for the digestion than the excessive quantities of cake and preserves which generally supplement the left-overs. And since one does not want always to seat soup, how about sandwiches? There are so many delightful sandwich fillings which can be made in odd moments and put away in the refrigerator to be used a day or two later, each person at the table making his own sandwiches as he wants them.

A Misconception.

The pure food agitation has been an admirable thing in most ways. At least, if it makes us any happier, we know exactly what we are eating, even if the formula on the can is somewhat incomprehensible. The unfortunate thing, however, is that the tendency has been to create an unreasoning prejudice in the minds of many people against all sorts of canned goods. The real objection to canned goods is not on the score of purity, but of cost, which, as compared with that of the same article freshly prepared, is out of all proportion. The whole matter resolves itself into a question of the value of the housewife's time. If it has a definite value, either in money or in use to other people, let her take every advantage resulting from the use of prepared foods. But if she has abundant leisure which she elects to spend on her housekeeping, the advantage is all on the side of the freshly cooked food. And if she has a maid, the most altruistic mistress will hardly be concerned with the need of saving her the peeling of vegetables or the stirring of porridge.

A Cheese Economy.

Let the dealer of whom you buy your cheese know that you are a candidate for his unsalable odds and ends. He will

sell them for a trifle, and when you have cut out the mouldy bits and grated the remainder, you will have the means to various palatable additions to your menu. The sharper the cheese, the less it is to his advantage to keep such pieces, as a sharp dairy cheese moulds more quickly than a mild one, and for cooking the advantage is all on the side of that with a distinct tang. In setting up an emergency shelf, a plentiful supply of cheese should not be forgotten, as it opens so many delightful possibilities.

The Fallacy of Labor-Saving.

This is the age of labor-saving utensils. Not a month but sees some invention marketed, which is to transform the average house into a palace of leisure, a place where "it is always afternoon." But does the average labor-saving utensil really save labor, or is it only an additional care? Does it not in many instances substitute for a muscular exertion, almost mechanical, and beneficial rather than otherwise, a mental effort which is something of a strain? Is it worth while to get an expensive vacuum cleaner when it requires the attention of two people to operate it effectually? If the meat grinder has to be taken apart to be cleaned every time it is used what is the advantage over ten minutes' work with a sharp chopping knife? Why grind your own coffee when the grocer will do it far better, and without charge? Almost everyone of our readers has on the upper shelf of her kitchen closet some expensive kitchen appliance which she has put away because it was too much trouble to use it. Most of us keep the attachments of our sewing machines in a drawer that is rarely opened.

A great many of the labor saving appliances have their special value in the very large family or the small institution, whose activities they assist effectively. For the average household the need is not so much of new appliances as of ordinary ones of good quality kept in order. Frequent sharpening of knives and oiling of wheels, good and varied brushes and cleansing powders and fluids and plentiful towels and cloths make work easy and pleasant, and are inexpensive as compared with most of the appliances.

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Any room, hall or closet or any of the upholstery, hangings, bedding or clothing in any part of the house can be cleaned in a jiffy—and cleaned thoroughly—by merely pressing an electric button on the wall.

This starts the machine in the basement to working. A hose with appropriate tools is provided to connect the pipes with the place or the articles to be cleaned. All the rest is automatic.

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It may be because the writer's birthday comes in August that she has always loved that month. It always seems to her the month of glowing color. Even the sunshine has a red tone and the fruits and flowers are deep toned. With the lengthening of the shadows and the lowering of the sun the texture of the flowers and the surface of the fruits seem to acquire a finer quality.

June is the pink and white month, July always seems to suggest scarlet geraniums and dark blue larkspur, but Aug-

ust brings the glowing orange of the nasturtiums and marigolds, the tawny yellow of dahlias, the golden browns of wall flowers and coreopsis, the most satisfying of all colors. Then too the August flowers are so generous of their beauty, so profuse in their blossoming. One does not have to scrimp but can revel in masses of splendid color.

August is the opportunity of the owner of blue china. Blue of any shade is at its very happiest in combination with orange or russet or tawny browns, and one gets such delightful effects for the



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by experienced users
No. 7

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TABLE CHAT—Continued

tea table or the formal luncheon. And the effect of the more sombre tones is equally good in the green dining room that is so popular in country houses. A very delightful sort of foliage to go with almost any of these August flowers is the euphorbia, an annual with no flower to speak of and exquisite green and white leaves, which in the mass give an indescribably beautiful silver effect. The fine thing about the euphorbia is that it sows itself and once you have it you have it always.

always be fitted to an old cover, or vice versa.

What to Cook in a Casserole.

Almost anything that you can cook in a chafing dish you can cook in a casserole, but the casserole is also very good indeed for all the things that need long, slow cooking, and there is no waste from evaporation.

All the casserole cook books give receipts for using lamb or mutton. I think it is a mistake to cook lamb in this way. The long continued heat brings out a



COCOANUT SANDWICHES.

Casserole Cooking for Out-Door Meals.

Food cooked in an earthen casserole is specially adapted to serving out of doors, because the heavy earthenware of the casserole is a non-conductor and retains the heat a long time. The casserole itself is rather picturesque, with its quaint shape and rough red clay. People who like the strictly conventional can find a great variety of casseroles in French and German stone ware, dark green or brown, with perfectly smooth exteriors and white linings. Everyone to his taste, but the advantage in many ways is on the side of the cheap and picturesque red clay. One thing in its favor is that the covers are sold separately and that the sizes are standardized, so that a new casserole can

woolly taste which is very disagreeable, while lamb and mutton are much tenderer meats than beef, veal, or poultry, and are better flavored when cooked more quickly, as in roasting or broiling, or sautéing in a dry frying pan.

While the casserole is generally used for preparations of meat, it is capital for all sorts of creamed vegetables. Make the cream sauce or drawn butter in the casserole, put in the vegetables and cook covered closely in a moderate oven for an hour, and you will be delighted with the blending of the flavors.

Fried Onions in a Casserole.

Everyone knows how hard it is to fry onions without scorching, particularly

FURNACES

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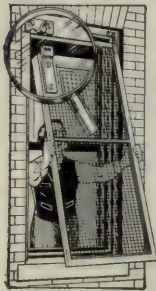
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TABLE CHAT—Continued

when they are done in butter. But melt the butter or oil in a casserole and put in the onions and they will color beautifully without burning, if stirred occasionally during the process. You can also fry eggs beautifully in a casserole, turning the egg the minute the white is set enough to run a cake turner under. Indeed there is no limit to the delightful things that can be done within its circumference.

Savory Rice.

One of our illustrations shows a very decorative dish for luncheon or a Sunday night supper. A cup of rice is cooked in two cups of highly seasoned chicken stock, until all the liquid is absorbed, and pressed into a round mould. Before serving it is decorated with slices of beet and hard boiled eggs, with halved olives and walnut meats and with sprigs of parsley. Pass mayonnaise and brown bread sandwiches with it.

Cocoanut Sandwiches.

Cocoanuts are almost always available in August and a pretty and unusual dessert is made by mixing grated cocoanut with powdered sugar and the whipped white of an egg, making the mixture quite stiff, spreading it between and on top of very thin wafers, pressing into the tops raisins which have been soaked in sherry or brandy. Leave in a slow oven until the cocoanut is delicately browned.

A Table Decoration.

The seeds of grapefruit can be utilized for a table decoration. Select the choicest of the seeds, soak in water for fifteen or twenty minutes and plant in the rich soil of a fern dish. Plant at least two dozen seeds. Then keep the dish in the sun and nurture as any plant. In a few weeks the dish will be green with many little shoots, all of a uniform size, about an inch apart, which later, without transplanting or thinning out, will grow to any height required. But as soon as the plants are a couple of inches high the dish can be placed in its standard and used as a table decoration. The growth is not only distinctively tropical and mystifying to one's friends, but the plants emit a faint sweet odor. So if the seeds are planted in the early fall, one

can have the advantage of an ornamentation through the early winter months. Or if planted in mid-winter it is not too late for the seeds to be up in time for a choice Easter gift. And if reserved for later use, such as a table decoration after the ferns of the house have been removed to the veranda, the plants will keep green and healthy through the summer.—*House and Garden.*

Making a Croustade.

This is a very pretty way of serving any sort of creamed fish, chicken or oysters. You get a square or oblong loaf of baker's bread, as high a loaf as possible, and you trim off all the crust, cutting a thick slice off the top for a cover. Then you scoop out the inside, leaving a wall of bread about an inch thick. You spread the lid and its edges and the sides of the loaf thickly with butter and put it into the oven to brown nicely, with the cover on. In the meantime you have your filling ready and at serving time you fill the cavity and put on the lid. If you are in the habit of deep frying, you can omit the buttering and plunge your hollowed-out loaf into boiling fat. This is more often done with individual croustades. Done in the oven a croustade is an extremely good looking dish and comparatively little trouble. It gives you a use for a stale loaf of bread, and a prudent person will plan for stuffed veal or bread pudding the next day to use up the crumbs taken from the center of the loaf.

Serving Salad and Cold Meat.

For lunch or for Sunday night supper lettuce and cold meat can be effectively served on the same platter. Beef or veal loaf is very nice for this purpose, cut in thin slices, or slices of ham, cold roast beef, or lamb can be arranged on the lettuce. The sauce to be eaten with the meat can be piled in the center of the platter in a cup of the lettuce leaves, while the salad dressing is passed separately.

Another way of serving is to cut the lettuce into shreds, mix it with dressing and arrange it in crescent shape on the individual plates, with a slice of cold meat in the hollow of the crescent. This is pretty for jellied chicken. Little balls of cottage cheese are a pretty garnish.



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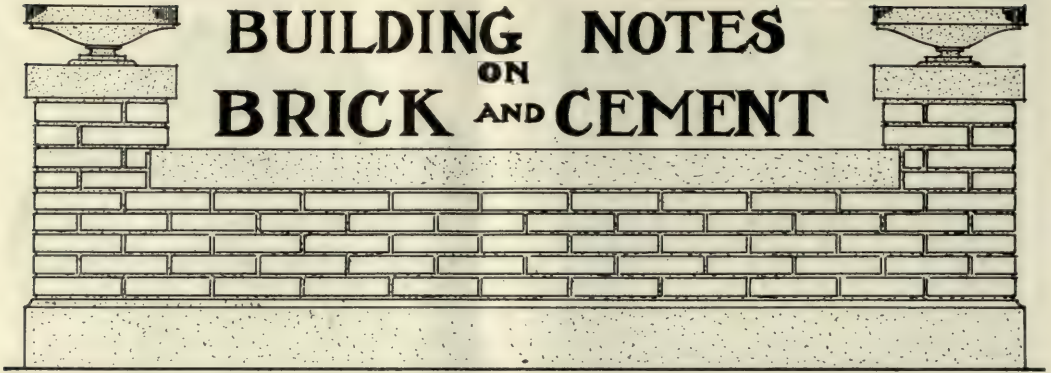
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BUILDING NOTES ON BRICK AND CEMENT



Some Pointers About Brick.



OT one person in ten knows what is meant when the term Rain-wash brick is used, or how these differ from the Rock-faced.

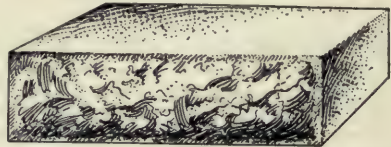
Rock-faced Bricks.—Rock-faced bricks are pressed bricks, the face edges of which have been roughened in imitation of cut-stone, as shown in illustration. In some cases the rock facing is effected by cutting the bricks with a chisel, but more frequently the bricks are molded in the form shown. As these bricks, in a way, are imitations of stones cut to the size and shape, they must have more or less the appearance of blocks of stone, and must therefore contain at least the full thickness of a common brick. For this reason rock-faced bricks are made only in the pressed-brick size of $8\frac{1}{4} \times 4 \times 2\frac{1}{4}$ inches.

Rock-faced bricks can be had in any of the colors of ordinary pressed bricks, and when laid up in a wall present a pleasing appearance. An illustration of a rain-wash brick here is shown. This was, perhaps, the pioneer of all rough-faced bricks, and the effect produced by its use was no doubt the stimulus to further investigation and experiment along that line. A good rain-wash brick is far more pleasing to the eye than the ordinary brick, and compares very favorably with a wall of more expensive materials, particularly when the rain-wash bricks are laid up with rough joints.

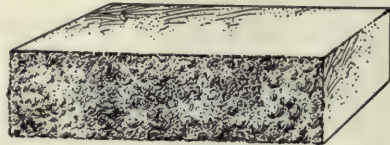
As rain-wash bricks are made from common bricks or "selects," they are of necessity made in the same size and shape as common bricks, with which they may be classed so far as size, weight, strength and durability are concerned. In price

they are a little higher than common bricks, but cheaper than most other kinds of face bricks. Rain-wash bricks are sometimes called "washed-face common bricks."

Laid up in a wall, these rain-wash bricks present a pleasing appearance, which resulted at one time in a demand



Rock-Faced Brick.



Rain-Wash Brick.

for them which could not be supplied by the natural process, owing to the infrequency and uncertainty of rain, so the artificial facing of rain-wash bricks by using water from the water supply to sprinkle them with, instead of rain water, was resorted to. The sprinkling process washes away the fine clay, leaving the pebbles and coarser particles of the brick exposed, thereby producing a roughened surface, and one never similar to the others.

Pressed bricks are made in two standard sizes—the ordinary pressed brick, which is $8\frac{1}{4} \times 4 \times 2\frac{1}{4}$, and the Roman shaped brick, which is $12 \times 4 \times 1\frac{1}{2}$ in size. Besides these, special $12 \times 6 \times 1\frac{1}{2}$ bricks are made, also $10 \times 4 \times 1\frac{1}{2}$ bricks.

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We have received from the Association of American Portland Cement Manufacturers, publishers, a volume of unusual beauty and excellence, entitled **The Concrete House and its Construction**, by Maurice M. Sloan. From the chaste and refined cover—in two tones of softest gray, lettered in gold—to the excellent index of subjects treated at the close, this book is a superb specimen of illustration and press work. This, however,

The book is so full of beautiful illustrations of these that it is hard to select, but the illustrations on page 18, showing severely plain concrete walls relieved by a decoration border in low relief—on page 35, showing excellent treatment of concrete cottages; on page 47, illustrating an entrance of unusual beauty; on page 72, a living room porch, all in concrete; on page 138, showing the beauty of pure sanitary treatment of a service



A SMALL HOUSE DESIGN IN MONOLITHIC CONSTRUCTION.

is the smallest part of its value. We have seen nothing which presents the subject of concrete construction in so illuminating a manner. While the chapters on Details of Construction, Operations in the Field, Calculations for Determining the Strength and Design of Reinforced Concrete in House Construction and Calculations for the Bending Moments in Beams and Slabs, with tables, are most valuable and comprehensive to the architect and builder, the non-technical portions of the volume are very attractive to the layman who is interested in the concrete and actual examples of things accomplished.

court in the rear, are a few instances taken at random from this profusely illustrated volume.

We reproduce here the example given on page 29 of the book, of a small house design in monolithic construction, as of special interest to the readers of Keith's Magazine. The numerous and suggestive details shown of entrance motifs and decoration are among the interesting features. The whole subject of concrete construction, as applied to houses, is treated from a practical, but also from the aesthetic, standpoint. The book is worth far more than the price of \$1 to all interested in building.



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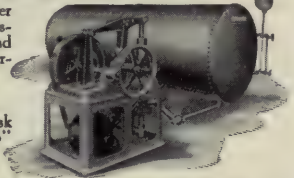
Being responsible for the satisfactory working of every Kewanee System, we received all complaints in regard to defects in pumping machinery and difficulties encountered in installing and operating it. As far as possible, we had manufacturers change designs and material to correct the faults in their pumps and we began making our own pumping machinery only when we found that old designs, old shop machinery,

and old methods prevented us from getting as good pumping machinery for our customers as we knew they were entitled to.

We candidly believe that when we started to make our own line of pumping machinery, we had a better knowledge of the strong and weak points of what the market afforded in this line and also of the difficulties in installing and operating which were encountered by all kinds of men in all kinds of places, than anyone else ever had.

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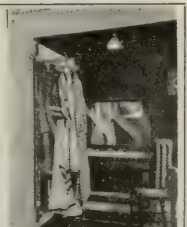
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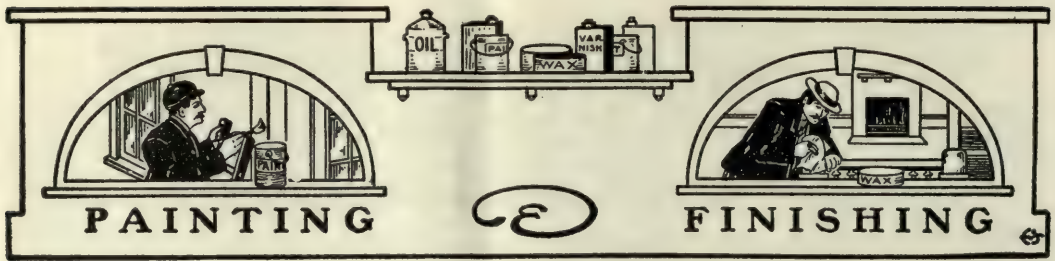
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Room 612 Architectural Dept., Grand Rapids, Mich.



Wardrobe in an Alcove Dressing Room—Garments extended.



Laying and Finishing Oak Floors.



HE laying of oak flooring is not very difficult, and any first class carpenter can make a good job. A sub-floor should be used under both the 13/16-in. and 3/8-in. thicknesses. The sub-floor should be reasonably dry and laid diagonally. Boards of about 6 inches wide are preferred. These boards should not be put down too tight, and should be thoroughly dried and cleaned before oak flooring is laid.

It is well to use a damp-proof paper between the oak flooring and the sub-floor. Where sound-proof results are desired, a heavy deadening felt is recommended.

Oak flooring should be laid at an angle to the sub-floor. After laying and nailing three or four pieces, use a short piece of hardwood 2x4 in. placed against the tongue, and drive it up with a sledge.

The nailing of oak flooring is very important. All tongued and grooved oak flooring should be blind nailed. The best floor made can be spoiled by the use of improper nails. The steel-cut variety is recommended for all blind nailing.

For 13/16 in. use 8-penny steel-cut flooring nails. For 3/8 in. use 3-penny wire finishing nails.

The maximum distance between the nails should be:

For 13/16-in. thicknesses.... 16 in.

For 3/8-in. thicknesses.... 10 in.

For even better results, it is recommended that the nails be driven closer than indicated.

Scraping Oak Floors.

After the oak floor is laid and thoroughly swept, it is best to scrape it in order to get the best results for a nicely polished surface. This scraping process can be done by the ordinary scrapers, such as used by cabinet makers, or by one of the many types of power or hand-

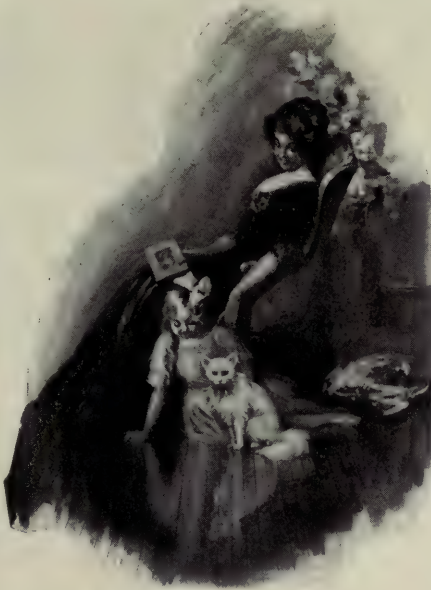
scraping machines that are generally used by contractors and carpenters. Always scrape lengthwise of the wood and not across the grain. A floor properly scraped looks very smooth, but still it should be thoroughly gone over with No. 1½ sand-paper to obtain the best results in finishing. After this the floor should be swept clean and the dust removed with a soft cloth. The floor is now ready for the finish.

Finishing Oak Floors.

The finishing of an oak floor is a very important feature, upon which authorities fail to agree, but the question resolves itself into a matter of cost as to the color or brilliancy of finish desired. Personal taste, artistic or decorative effects, are the guide for the floor finisher.

The clear grade of oak flooring should have a natural oak filler—color of oak; the select and sap clear grades, a light golden oak filler should be used, and after the floor is filled it should be gone over with a little burnt umber mixed with turpentine to darken light streaks. This will make the select and sap clear grades look like the clear grade, except that it will be slightly darker in color. In filling the No. 1 common grade a dark golden oak filler should be employed, and the light streaks should be darkened in the same manner as the select and sap clear grades. If a little care is used in laying this grade splendid results can be obtained.

Treat the floor with a paste filler of desired tone to fill up the pores and crevices. To thin the filler for application, one has a choice of using turpentine, benzine, wood alcohol or gasoline to get the right consistency. When the gloss has left the filler, rub off with excelsior or cloth, rubbing against the grain of the wood. This will make a perfectly smooth and level surface. It keeps out dirt and forms a good foundation, which is the keynote for successful treatment of floors.



Oak Flooring

**"AMERICA'S BEST
FLOORING"**

- ❑ OWNERS and BUILDERS find it a clinching argument to say "It's Floored with OAK FLOORING." It means that the tenant or buyer will be glad to pay 10 to 15 per cent more. In color, it is **rich and cheerful**, and imparts an air of **refinement and elegance** to a home. It is the **modern flooring**.
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- ❑ A carpenter or handy man can lay OAK FLOORING successfully. It is very **profitable work** for any carpenter.
- ❑ OAK FLOORING is made in seven different grades—representing different prices to fit the pocketbook or condition under which they are used. There is no limit to the uses of OAK FLOORING and the prices are such that there is one or more grades adaptable to every class of construction.

Write for booklet

The Oak Flooring Bureau

898 Hammond Bldg., Detroit, Mich.



"Lacklustre" Duplicates The Beauty Born of Centuries

This wonderful liquid with one application produces that desired antique effect so beautiful in home interiors.

With just one operation you can transform the style of your woodwork to Old English, Mission or Flanders.

Anyone can apply "Lacklustre" with a brush or cloth. Then wipe it off with a piece of cheesecloth and you find perfectly reproduced all the rich shadows, all the soft tints and colorings of the finer antique woods.

And the finish is permanent as well as beautiful. "Lacklustre" dries quickly, penetrates and preserves the wood and does not hide the grain. It gives the gloss of wax but has none of the objectionable features.

The presence of a small amount of "Liquid Granite" Varnish in this preparation insures the permanency and lasting beauty of the "Lacklustre" finish.

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FACTORIES: Detroit, Mich., and Walkerville, Ont.

BRANCHES: New York, Boston, Philadelphia, Baltimore, Chicago, Cincinnati, St. Louis, San Francisco, London, England.

PAINTING AND FINISHING—Continued

Allow the filler 12 hours to set or dry before applying a wax or varnish finish. Never use a liquid filler on any floor.

A wax or varnish finish can be used. The wax finish is preferred by many, due to economy and ease of renewing places that show the wear. This renewing can be easily applied by housekeeper or servant.

Wax Finish.

The best method for applying the wax is to take cheesecloth and double it to get a little more thickness; then make it into a sort of bag. Put a handful of wax inside of this and go over the floor thoroughly. You will find that you can work the wax through the meshes of the cheesecloth to give an even coating over the floor. This prevents too much wax in spots and wasting it. After the floor has been gone over with the wax and allowed to dry, say about 20 minutes, it is ready for polishing. Rub to a polish with a weighted floor brush, first across the grain of the wood, then with it (a clean, soft cloth can be used in place of the brush if desired); then a piece of woolen felt or carpet should be placed under the brush to give the finishing gloss. After waiting an hour, a second coat of wax should be applied in the same way as the first and rubbed to a polish.

Varnish Finish.

This is usually more expensive than the wax finish, but it gives a very hard surface, yet at the same time it is elastic. Two or three coats should be applied after the application of the paste filler. Each coat should be thoroughly rubbed with oil and pumice. Any of the standard hardwood flooring varnishes are recommended.—*The Building Age.*

To Wash Varnished Paint.

Varnished paint must be treated somewhat differently from unvarnished paint to prevent lack of luster. In the first place dust the paint thoroughly, then dissolve two tablespoonfuls of powdered borax in a little boiling water and add to this sufficient cold water to bring the total amount used to three pints. Sponge the paint well with this, then rinse in tepid water, dry and rub with a soft clean cloth. When thoroughly dry, rub with a little furniture polish.

For unvarnished paint the borax should be dissolved as above, then diluted with lukewarm water, a little soap jelly being added to the water. Apply as before, rinsing it with lukewarm water and washing only a little at a time, drying it as you go along.

To clean white paint and enamel mix fine whitening to a cream with water and apply this lightly, rinsing it off with clean water and drying it with a soft, clean cloth.—*House and Garden.*

Composition Floors.

In 1866, Stanislas Sorel, a French engineer, patented this composition in this country and about the same time patented the cement much used by dentists, which is of a nature similar to the oxychloride cement of magnesia, but having zinc as its base. This Sorel stone, as it was formerly called, has found a large use in Germany and elsewhere in Europe, principally for laying sanitary floors, counter tops and for steamship decks.

Its slow hardening or setting is a desirable feature of this material; the chemical reaction taking place slowly through a period of say 24 hours, is much preferable to a quick set. For instance, I have had floors that set in a half hour's time, I have also had floors in which the chemical action took place so rapidly as to produce extreme heat, sufficient to burn one's hand.

In Europe most of the floors are scraped, like hardwood floors, when in a cheesy state, later on finished by polishing, then oiled or waxed; this produces a very beautiful "Steinholz" floor. I am acquainted with formulas and work of about 20 European concerns, having visited them and seen much of their work. They attempt on the whole much more elaborate work than is usually done by the manufacturers in this country, since their labor and materials are more cheaply obtained. Very artistic marble or terrazzo effects are obtained and if kept oiled or waxed such floors will wear and look well indefinitely. I have laid such floors in banks and court houses in this territory with good success, due to the fact that their janitors properly attended to such waxing and oiling.—*Concrete Cement Age.*



Comfort and Privacy The Burlington Venetian Blind

will shade your porch and enable you to make your porch a haven of rest and comfort on sizzling hot days.

With the Burlington Venetian Blind you will get the advantages of open air, and at the same time you will be secluded from the gaze of passers-by. It is easy to adjust the Burlington Venetian Blind to any angle. The top can be opened for light and ventilation and the lower part closed to keep out the sun.

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KNO-BURN METAL LATH

is a flat sheet of metal fabric with a weblike mesh that completely imbeds itself in the plaster. This form of construction produces a reinforced concrete-like wall. The plaster simply *can't* come off.

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for outside use is a metal fabric similar to KNO-BURN with parallel ribs that increase its strength and provide a substitute for furring. It has the same weblike plaster-gripping mesh that makes KNO-BURN so effective.

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965 Old Colony Building CHICAGO

Heating, Lighting and Plumbing

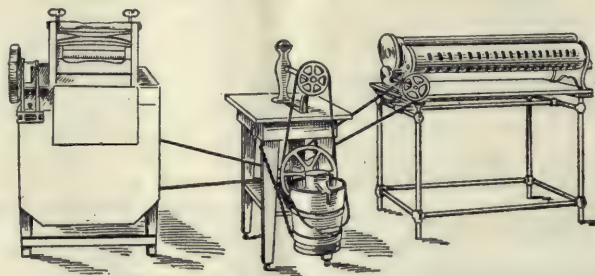
Electric Power Plant for the Kitchen.

PRACTICALLY every machine that can be used in the kitchen or about the home is now harnessed up to electricity and being marketed by electrical companies, but the most practical all-around mechanical assistant so far designed for the kitchen is the portable power table. This table stands 30 in. high, and is 26 in. long and 18 in. wide. It is made of oak and has a non-rusting nickeloid top.

Advantages of Independent Water Heaters.

Just now there is a lively need for better water-heating devices for laundry, bath and hot faucet supply in thousands of illy-supplied homes in every section of the country. Heating water by a coil in a kitchen range, hot air furnace, steam or water-heating boiler never gives full satisfaction—unbalanced results.

The coil often prevents the range, furnace or boiler from giving best results,



The Power Table, Operating Ice Cream Freezer, Washing Machine and Mangle.

Mounted on the lower shelf, where it is protected from spilled foods and dangling apron strings, is a $\frac{1}{4}$ -h.p. motor, with gears entirely inclosed by heavy metal casings.

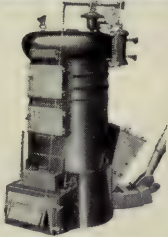
This power table may be moved from place to place and harnessed up to the numerous utensils and machines designed for electric operation. An egg beater, coffee grinder, bread mixer, knife sharpener, cake mixer, vegetable and fruit peeler and slicer, and like utensils, may be attached to the shafting above the table top, while the sewing machine, ice-cream freezer, washing machine, or clothes mangle may be connected up by belting. Two or three of them, for that matter, may be harnessed up at once and a large amount of work accomplished.

for it interferes with the cooking or heating. Besides, the coils burn out; and, in hot air furnaces or boilers they are only available for about seven months in a year (during the heating season.) During the other five months the coils simply rust out, while the family has to depend on a range coil, or go back to tea kettles, wash boilers, etc.

In many cases the coil throws things out of balance. It is not really economical, because it takes just so much coal to produce a certain amount of heat; and when it is used to heat up water passing through a waterfront or coil, the same heat will not either bake bread or furnish warmth for radiators. In the milder days of winter the housewife is annoyed by the lack of hot water because the check

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CUTS YOUR COAL BILL $\frac{1}{2}$ to $\frac{2}{3}$



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burning coals are on top, close to heating surfaces. UNDERFEED heat, therefore, isn't lost after it's generated. It's utilized for your comfort.

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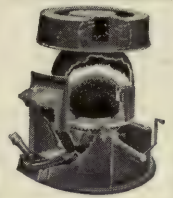
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IF YOU HAVE NO FIREPLACE you can secure the effect of an ordinary open grate by the use of a MAYFLOWER OPEN FRANKLIN. Many people use them in preference to the ordinary open fireplace.

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Will not increase your insurance rates. On the market over 40 years. More than 20,000 in use in Residences, Stores, Factories, Churches, Schools, Colleges, Hospitals. It will pay you to investigate. Write us today for catalog and names of users in your locality.

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Carburettor under ground

Machine in basement

damper must be kept open; and in the days of extreme winter weather she is alarmed at the rumblings in the tank and piping due to the necessity of prolonged forcing of the fire for heating requirements. Not understanding the causes, it is at such times she loses confidence in the ability of the fitter.

The common fallacy about coils is that an energetic little heat unit will skip out of a morsel of burning coal, swim through the water in the coil, heat up the said liquid, and then (say, in a steam boiler fire-pot) make its escape from the coil and dive into water of the boiler and set it boiling—doing double work. But this is not so. The heat unit and its companions, once passing into the coil water, go right straight to the storage tank or faucet, and stay there until the water is used in some cleaning process. A heat unit is a definite quantity; not an elastic proposition.

Vacuum Cleaners Best for Oriental Rugs.

The fear is sometimes expressed by feminine owners of expensive Oriental and Persian rugs that they will in time be damaged by vacuum cleaning; that the life of the rugs will be shortened.

All rug cleaning establishments have discarded old methods of cleaning in favor of vacuum cleaning. Rug departments of the big stores all approve vacuum cleaning of Oriental rugs without restriction. The managers of the rug departments of Chicago's big State street stores have stated personally to the writer that they believe vacuum cleaning to be ideal for the care of these fabrics—that they believed it would be a permanent feature of the modern high class home, and that this method of cleaning would have nothing but a beneficial ef-

fect upon the condition and life of the rugs and draperies. They use it for cleaning their salesrooms and for cleaning rugs returned from day to day by customers. Most of them offer vacuum cleaners for sale right in the rug sections, which is the strongest possible endorsement for this method of cleaning.

Consider the method by which the cleaning is accomplished as compared with the old style methods. If the fabric is cleaned with a broom the nap of the rug of fine or silky texture is repeatedly subjected to the hammering of the stiff, unyielding bristles forced violently across the nap. The tendency to break the nap off and wear it away is much more marked than when the vacuum cleaner is used, the directions of the air being always in the same direction as the nap usually takes, and the smooth metal tool passing lightly to and fro across the nap exerts no such tendency to break off the threads as is exerted by a bristled broom.

Where they do not use vacuum cleaning it is customary to take the rugs out periodically and beat them with carpet beaters. This subjects the rug to many times the strain that the continued use of a vacuum cleaner would impose. The weekly use of the vacuum cleaner on delicate fabrics would keep them absolutely free of the fine sand and dust which is bound to be blown into or tracked into them. The sharp edges form the cutting edge against which the nap is easily worn off in walking over the rug.

In addition, vacuum cleaning removes from fine rugs and other fabrics moths and other vermin which might find their way into them, and which could be found and removed by no other method.—*Ideal Heating Journal*.



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consisting of *Electric Washing Machines; Ironing Machines; Ironing Boards; etc.*, especially adapted for use in the laundry room of *Residences, Apartment Buildings* and moderate sized *Hotels, Hospitals, Sanitariums* and similar Institutions. Can furnish individual machines or complete outfits. Our appliances are the best that can be had—there are none better.

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White
and
Silent
as the
Drifting
Snow**

Cleanliness and sanitary excellence, beauty of form and grace of proportion and efficiency without noise, freedom from the whistling of valves and the roaring of water,—these are essential to complete satisfaction in water closet construction. Your toilet room can be made permanently beautiful, sanitary and practically noiseless by having your toilet equipped with the

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It is as pure and shimmering as the snow drifts and it operates so silently that it cannot be heard outside the toilet room. Or, if you prefer, it can be furnished in rich mahogany finish, highly polished and burnished. But the efficiency is always the same; the sanitary excellence never varies and the operation is always silent.

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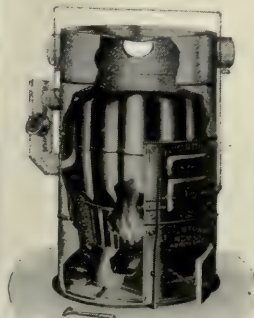
Make sure that your home will be as comfortable as it is attractive, as healthfully heated as it is strongly constructed. Tell your builder that you want a

XXth Century Furnace

For twenty years it has been acknowledged to be the most practical and economical furnace made. Over 40,000 homes use it and are getting a third more heat at a third less fuel cost. This is due to the exclusive, patented side-burning fire pot and air chamber which gives perfect and complete combustion and prevents waste of fuel. It consumes its own smoke and gases and burns the cheapest grades of soft coal and slack as effectively as the best of anthracite or coke.

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The dealer who sells you a XXTH CENTURY FURNACE knows his business—and your requirements. He will install the furnace so as to insure comfort and satisfaction to you for years. If you want to know your nearest dealer's name, write us. We will also make recommendations for the heating equipment you need if you will send us a plan or sketch of your home stating the number of rooms to be heated. Ask for booklet No. 46 fully describing Heaters.



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Heating &
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Co.**

Akron, Ohio

SPLINTERS AND SHAVINGS

Foundation Construction.

ED. NOTE—The following timely article from the "National Builder" is of such excellence that we reprint the major portion of it.



HE foundation of a building is the first part of its construction, and by far the most important to be made exactly right. In the latitude of Chicago there is no such thing as a foundation that is safe from frosts unless it extends at least 3 feet 6 inches below the natural grade of the lot on which the building is erected.

Big engineering propositions of foundations for sky-scrapers and extremely large buildings are always taken care of by capable engineering research and application, and have been discussed at length by the technical press from time to time. What we are calling attention to now is the foundation problem of the little cottages, the more pretentious residences, or other smaller buildings, of which there are immense numbers, and which constitute the larger part of all construction as well as the main consumption of all building materials.

At the present time the most popular foundation for such a building has come to be the 12-inch concrete wall, which, when properly made, is just about as nearly a perfect proposition for the purpose as can be devised; but not one out of a thousand is properly made. The contractor who takes the job generally figures from the plans of an architect who has never seen the lot and who assumes that the grade line will represent a level surface of the ground. He shows excavations amounting to a depth of 4 feet, so as to give a 6-inch margin. The ground slopes to one corner of the building in nearly every case, so the excavation on the low side will be no more than 6 inches or 10 inches. In fact, it may not extend through the black loam of the surface, and at that corner the building is entirely unprotected from the attacks of frost.

The contractor cannot afford to furnish any more material than he has figured to use in the foundation, for more than likely he has taken the job so as to simply make his own wages by putting in the foundation. Should he deepen the trench on the low side, and add three additional yards of concrete to his foundation, it would amount to his wiping out all the profit as well as his wages for putting in the foundation. The result is that the foundation as put in may be short of cement, but even when there is plenty of cement put into the concrete, the work is done so cheaply that the contractor cannot afford to mix the concrete properly. It is usually just a case of shoveling in some crushed rock, along with a little sand and a little cement to make a spongy, porous concrete which is not worthy of the name and not fit for any structural use.

Naturally, such a foundation has to be first daubed up with plaster on the outside, then it has to be treated with all manner of waterproofing compounds and devices to keep the soil waters from penetrating the wall and so making a wet basement. In spite of all the precautions of waterproofing, close to one hundred per cent of all such foundations are damp, are wet, and will always be unsatisfactory.

Notwithstanding all that has been published and said by technical men on the subject of mixing concrete and making it wet enough so as to puddle the moisture to the surface, very little puddling of concrete is ever really done. The main dependence for securing solidity by the usual foundation contractor is the weight of the material when it is shoveled into the forms. True, the workmen may walk backward and forward, stepping on the material, and so tamping it down with their weight, but it is incomplete, insufficient and unsatisfactory. If this is not remedied it is quite certain that there will be a return to the use of rubble stone for foundation purposes, which will keep the

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CCHARMING Moorish beauty and dignity of appearance of Metal Spanish Tile gives an air of distinction to the home graced by this wonderful new and practically indestructible roofing.

It has taken home builders of America by storm, for it is the modernization of the wonderfully beautiful roofs of historic Spanish edifices.

The art of making this roofing, left behind by fleeing Moors driven out of Spain centuries ago, until 1910 could not be made practical for the modern home, despite its alluring beauties.

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Its scores of vital, practical advantages cost no more than common roofing, yet mean tremendous economy—it needs no repairs and outlasts several ordinary roofs because of its practically indestructible metal construction.

It is absolutely wind, weather, storm, fire and lightning proof.

Easy to apply. No soldering, no special tools—any ordinary mechanic can apply it. Interlocking system by which tiles dovetail into each other makes the roof absolutely water tight and provides for expansion and contraction perfectly—summer and winter. It is guaranteed non-breakable.

HOME-BUILDERS—Simply send us today the dimensions of your building and we will tell you by return mail exact cost of all material. Our new 1912 book on beautifying the modern American home by use of **Metal Spanish Tile** is yours for the asking. A postal will bring it. Address

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CINCINNATI, OHIO



The Beauty Spot

may be a work of nature or of man. If of man, why not make it the new home, and its surroundings?

¶ Good taste and economy go hand in hand with proper guidance. It is a great mistake to suppose that beautiful, permanent building is necessarily costly.

¶ The garage, drive and wall pictured show the effect secured by Atlas-White Portland Cement stucco, on Atlas Portland Cement solid concrete. The appearance and durability is that of white marble, the economy equally striking.

¶ We have some books on concrete that will interest you—yours for the asking. Won't you write us?

*ATLAS—"The standard by which
all other makes are measured."*

THE ATLAS PORTLAND CEMENT CO.

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Corn Exch. Bank Bldg., Chicago, Ill.

Morris Bldg., Phila., Pa.

Plymouth Bldg., Minneapolis, Minn.

Productive capacity over 50,000 barrels per day—
largest in the world.



SPLINTERS AND SHAVINGS—Continued

concrete man out of a very large portion of the business which he now enjoys.

Half of the contractors who put in residence foundations proceed by the following method: They will spread out on a mixing board, or on the ground, a yard of crushed rock. On top of this they will spread half a yard of sand; on top of the sand they will spread, fairly evenly, four or five bags of cement. Then they will throw on a few buckets of water and immediately begin to shovel the entire mass into the forms, without any pretense of turning it over or mixing it, claiming that the stuff is all loose and wet and mixes as it goes in. They claim that it is impossible to keep it from mixing, and, consequently, there is no use to go to the expense of paying men to shovel several tons of material two or three times, when it can be done with one shoveling.

This mixing proposition is very seldom improved upon, even when there is a small hand mixer on the job, because it is somewhat of a back-breaking undertaking to grind the crank of a hand mixer, and the laborer who has this part of the work to do does not care a rap about the quality of the material he is producing, and every turn that he can avoid is carefully avoided.

There is no question whatever but that a good solid foundation made of concrete, well mixed, well tamped and properly proportioned, will be just about as tight as a jug. If it extends down 3 feet 6 inches below natural grade it will be just as safe from frost and in every way as nearly perfect a foundation as can be secured.

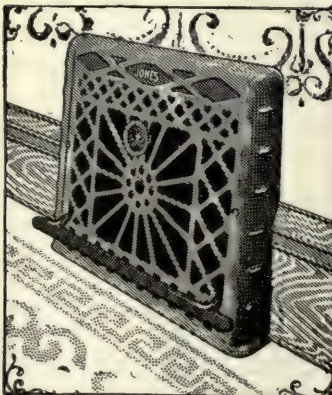
When the excavation for a foundation

extends 3 feet 6 inches, or even 4 feet below natural grade, it will not be impervious from an attack of frost, unless the back-filling of dirt against the foundation, when finished, is well rammed into place and the dirt piled up a little higher immediately at the edge of the foundation, so as to throw the surface water a few inches away from the building.

It would be difficult to estimate the amount of money involved in the damages to buildings where lack of depth of the footing allows the frost to go under the building.

There is an idea prevalent among even experienced contractors that loose dirt from the excavation can be piled up against the foundation of the building, and so built up to make the 4-foot depth to their footing. Made ground is not a protection against frost until it has had from thirty to thirty-two winters, even though the footings are placed as deep as sixteen feet in made ground.

Made ground should never be considered as having any value in the placing of the footing of a building. A 3-foot 6-inch or 4-foot excavation below the surface of the natural grade does not indicate that the penetration of frosts in severe winters is limited to that depth. Penetrations of frost into the ground have been found seven and even eight feet. But it does mean that in the usual construction of buildings the quantity of moisture that penetrates through the various earthly strata to the depth of three and one-half feet is not sufficient to form a crystalline arch of ice, which, by contraction and expansion, disturbs the footing of the building.



COMFORT IN THE HOME

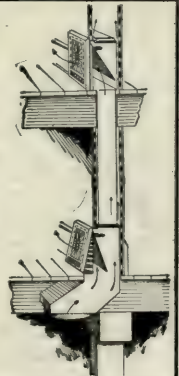
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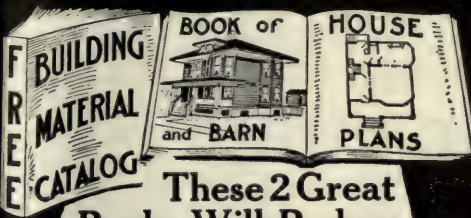


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* * *

We have received from the committee in charge, the Report of the Tests of Partitions by Fire and Water, recently conducted in Cleveland, O. The report is published in pamphlet form and freely illustrated by photographs taken during the progress of the tests.

* * *

The Mouat-Squires Co., Cleveland, O., send us their booklet describing and illustrating the Mouat Vapor Heating System, whose specialty is a modified heat control at each radiator. By this device the discomfort due to over-heating in mild weather is entirely overcome. One room may be kept at a higher temperature than others. The operation of the regulator is simple and is described in a lucid manner.

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The Grand Rapids Furniture Record Co. send us their recent book on Cabinet Making, by J. H. Rudd, containing the principles of designing and constructing furniture. It contains diagrams and tables which cannot fail to be of value to the furniture craftsman, with a simple and concise text describing the processes. Price of the volume, \$1.50.

* * *

In line with our departments on Table Chat and Household Economics, is the volume just received from Doubleday, Page & Co., on The New Housekeeping, by Christine Frederick, national secretary and consulting household editor of The Ladies' Home Journal. Readers who saw the series of four articles on this subject by this writer appearing in the Ladies' Home Journal last fall will hardly need any other recommendation to the present volume. It contains the writer's personal experiences and struggles with the household problems that confront the housekeeper of today. It records too, her success in the practical application of efficiency science to these problems. It is not the preaching of the writer whose aim is to fill space, and who knows nothing—and never will know—about practicing her exhortations. Mrs. Frederick shows, by actual deeds, how the principles of efficiency in business can be applied successfully to the business of housekeeping, thus eliminating much of its routine drudgery. Many diagrams add to the interest and value of the book sent by the publishers. Net price, \$1.00.

* * *

The Northern Hemlock and Hardwood Manufacturers' Assn., Wausau, Wis., send us their very attractive booklet on Birch—America's Finest Wood. The in-



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terior finish is a subject of deep interest to every housebuilder. Not only does this booklet give convincing arguments for the excellence of birch as a finishing wood, but full-page photographs show sections of the wood many times magnified to illustrate its close, interwoven structure—the feature which gives birch its strength and density as well as its wear-resisting and stain-holding qualities. A specially desirable quality in birch is its toughness for floors and non-splintering quality.

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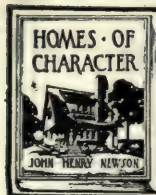
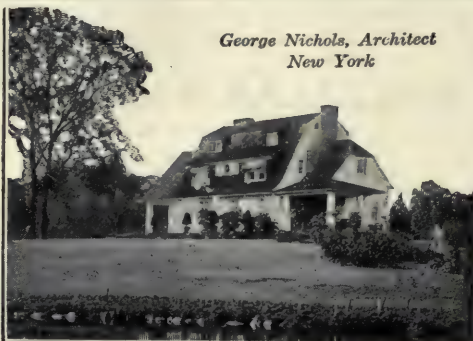
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THE NOBLE ENTRANCE FACADE WITH ITS BEAUTIFUL CLASSIC DETAIL.

KEITH'S MAGAZINE

VOL. XXX

SEPTEMBER, 1913

No. 3



ADMIRABLY SUITED TO ITS STATELY SETTING.

A Suburban Home in Newton, Massachusetts

Photographs by T. E. Marr

THE very beautiful suburban home we have chosen to illustrate is situated in the region of beautiful homes which surrounds Boston.

It is a fine example of logical and straightforward composition. Not only is the design itself, architecturally almost

flawless, but the materials are thoroughly in harmony. The construction is of hollow tile, with a veneer of gray Roman-shaped brick, long and narrow. Pink Milford granite is used for the foundation and steps, stone cappings trim the sills of the windows, and this note of color in

the stone is strengthened by the red quarry tiles of the porch floor and terraces. The stately Corinthian pillars of the beautiful classic entrance portico, the architrave and cornice above, carried around the entire house, with the porch and parapet railing—are all of wood, very handsomely finished in white. The

reinforcement. Of course there is nothing new about this treatment. Angles have been the objects of regard since we had architecture. But in this case the harmony of the entire conception is most happily carried out by the pilaster treatment of the angles. We have also seen many classic designs, whose beauty was



THE ENTRANCE HALL, ENRICHED BY FLEMISH CARVINGS AND FURNISHINGS.

frontispiece shows the detail of this entrance very clearly, with the front door of dark mahogany with latticed panels below a fanlight transom above.

For chaste and symmetrical composition it would be difficult to find a more striking illustration; it is certainly worthy of the well known architects whose work it is. The delightful proportions of the building are emphasized by the pilaster treatment of the angles, which in a home of this character are the logical points of

so marred by florid and ornamental detail, as to destroy all pleasure in the type; or we have seen what was intended to be stately and massive, resulting in mere clumsiness.

Not only is this example delightful in itself, but it is admirably suited to its stately setting, placed as it is on the rising slope with the graceful drive sweeping around it and the fine groupings of the trees and shrubbery.

Few realize how important a part in



CHASTE AND REFINED TREATMENT OF ONE OF THE CHAMBERS.

the scheme of things is played by the materials in which a design is executed. Not only must the design be fitted to the place but only certain materials are fitted to certain color effects. For instance, wood alone would have been inadequate to the dignity of this situation, and stone would have demanded a totally different treatment and resulted in a totally different color scheme. The combination chosen of the grey Roman brick with the noble classic detail and the faint tinge of color in the stone trim, has resulted in a very perfect realization of the picture in the architect's mind; a result which is by no means universal.

Having thus expressed our pleasure and satisfaction in the beautiful conception and its perfect interpretation, it is with regret that we acknowledge a feeling of disappointment in the interior treatment.

The chaste and refined decoration which so charms us in the exterior detail

it is true is carried into the treatment of the ivory wood paneling and cornice of the entrance hall; but the staircase strikes a false note. The intricate and elaborate spirals and carvings are out of tune with the general design. So too are the fire-place facings, which in the dining room, are of red Breccia marble and in the reception room of the same marble in violet coloring. Well we know that the individual ideas of the owner must be reckoned with, in building a house, and that the architect often must allow the introduction of features which are sorely trying to his own sense of fitness. Even when the owner's taste is undoubted, they often are not able to foresee just the effect that certain ideas will have upon the whole. It is true that the Flemish type here used is faithfully reproduced both in the staircase treatment and in the furniture, and that its voluptuous magnificence is an effective foil to the chaste simplicity of the woodwork. For the rest, nothing

could be happier than the choice of the foliage tapestry in soft and blended greys for the wall, and the rich coloring of the stair carpet and oriental rugs on the polished mahogany floors.

The lighting is a good example of modern usage, all the lights being concealed above the plaster cornice and cove. The reception room is furnished in white and grey enamel, Louis XVI style, and the dining room has a high wainscot and a beamed ceiling of Mexican mahogany. The living room is treated in quartered oak stained dark with ornamental plaster panels between the ceiling beams. In the living room, the fireplace is built of brown Roman brick which is in excellent harmony. There is a billiard room with a fireplace facing of Moravian tile and a den finished in cypress. The floor of the billiard room is covered with cork tile and the same in the kitchen.

On the second floor there are five bedrooms besides the servants' rooms. The principal rooms have each their own bath, five in all. There is also a boudoir and sewing room. All the bathrooms have tiled floors and wainscot. A view is

given of one of the bedrooms in which the chaste refinement which characterizes the exterior appears in a felicitous decoration and furnishing. The beauty of the single panel doors, the grey and white fireplace brick, carrying out the soft grey of the walls and white woodwork, the blended grey tones of the rug, all are a soft and charming background for the rich but quiet elegance of the furniture, its dark beauty relieved against the grey walls. Color notes are introduced in a delicate rose border placed below the molding of the ceiling angle, in the covering of the graceful Marie Antoinette couch and in the hangings at the windows. The open door gives a glimpse of the tiled bathroom attached.

The house as a whole is a notable example of a skillful and successful handling of classic architectural forms without slavish subservience to a special type. The combination of Italian and Georgian treatment is employed in a delightful manner and results in a charming structure which is its own best eulogy and whose principal characteristic is a noble simplicity of detail.

Garden Gates and Other Features

By E. I. Farrington



IT IS A PITY that American gardens are not more often out-door living rooms rather than mere show places. In England and other lands the gardens are correlated with the houses in such an intimate way that it seems a matter of course to spend much of the time in the open air. It is becoming more the fashion in this country, though, to furnish the garden so that it will tempt the visitor to linger, and no doubt our gardens will take on a more friendly aspect as they become seasoned.

Curiously enough, the Italian pergola, has played an important part in developing American gardens along this line. This favorite architectural feature has taken a strong hold on the people of this country and sometimes is used where it is sadly out of place. On the whole, however, it is to be welcomed. It is more attractive than the ordinary summer house or arbor and may be used in various interesting ways. Its real object should be to support the climbing vines, of course.

One of the accompanying illustrations shows a delightful adaption of the pergola idea. The gateway divides a flower garden from a vegetable garden at the rear of a New England home and breaks a low stone wall, with a cement coping. The posts are made of cut stone and have a cement capping. The pergolized top is

tables, stands and other accessories. Often garden furniture of wood painted white is especially attractive. Such pieces are not expensive and are made to endure the weather without bad results. If there is a brick wall, it is a simple matter to construct a recess at the end of the garden, with a built-in seat. The wooden furni-



ATTRACTIVE GATE DIVIDING FLOWER AND VEGETABLE GARDENS.

ture has one distinct advantage, it may be moved about at will, so that it may be used when tea is served under the trees or on the occasion of a garden party.

Most people consider that a garden is by no means properly furnished unless it contains a sun-dial. Around what other garden adornment clusters so much romance? For ages past it has figured in song and story, and it deserves a place in the garden if only for its sentimental value. Often it is inscribed with a motto, as, for example, "My face marks the sun-

tables, stands and other accessories. Often garden furniture of wood painted white is especially attractive. Such pieces are not expensive and are made to endure the weather without bad results. If there is a brick wall, it is a simple matter to construct a recess at the end of the garden, with a built-in seat. The wooden furni-

painting white, as is the old-fashioned gate, with its heavy hinges. Light and feathery vines are being grown to trail over the gateway in summer and the effect of the whole arrangement is most charming.

There should be seats of some kind in the garden. They may be imported marble benches or simply rustic chairs. Concrete benches are now being made in classic designs and are appropriate in a garden the character of which is at all formal. There are also stone and concrete

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ny hours; what can you say of yours?"

Many sun-dials are expensive, but it is not necessary to have that kind. An iron dial can be purchased for less than three dollars, I believe, and field stones, a large boulder or a good cedar post may be used for the pedestal. There are books which tell how to make a sun-dial at home. Sometimes the lawn is chosen for the sun-dial, but more often it is found in the very center of the garden, perhaps with roses or vines trained over it, or with a flower bed at its base.

Whenever possible, there should be a fountain or a pool. A concrete pool can be built for one hundred dollars in most localities. There must needs be a drain for carrying away the water and the pipe that supplies the water should have a shut-off at the



An Old English Garden Seat.



Gate to Kitchen Entrance.

house, so that there will be no danger from freezing in winter. When one really sets one's mind on a garden pool, the desired object may often be secured with almost no ex-



A Pergola Covered Garden Seat.

pense. Some years ago a woman in Pittsburgh craved a tiny pond in which she might have goldfish disporting themselves. After a time she hit upon an ingenious plan. There was an old, discarded bath tub in the basement and this tub she had sunk into the ground. A pipe for carrying away the surplus water when the plug was removed from within the tub was laid. Then the tub was filled with water and the goldfish installed. The improvised pool was a real success and was much enjoyed until the neighborhood cat learned of its existence and proceeded to fish for its finny occupants. The cats were finally circumvented by means of a large fireplace spark guard, which was laid over it, not interfering with the owner's pleasure in her pets but according them complete protection.

Bird houses may often be included among the garden furnishings with advantage in several ways. The houses may have an ornamental character of their own and they coax birds to come into the garden and feast on the bugs and

is inestimable, but quite apart from that consideration, they play an important part in giving a garden that atmosphere of peaceful joy which is its greatest charm. It is worth while making a study of the kinds of birds which are found in



A CONCRETE SUN-DIAL, WITH AMPELOPSIS CLINGING TO IT.

worms which are certain to abound, in spite of all the owner's efforts to get rid of them. This applies to pretty nearly all birds except English sparrows, whose presence should be discouraged in every way. They are the guerrillas of the bird kingdom and make life miserable for the feathered friends whose company we desire.

The amount of good which birds do

the neighborhood and the means by which they may be attracted. Here again the ubiquitous cat must be thought of. It is useless to try to foster the birds while the family cats are allowed their liberty. Some people have adopted the plan of keeping their feline pets confined to roomy cages in a shaded place while their feathered pets are nesting. I remember once seeing a beautiful angora



PERGOLA ENTRANCE THROUGH LATTICE FENCE.

kitten just in the act of snatching a half-fledged robin from a nest in the apple tree. At that moment the kitten did not appear nearly so beautiful as ordinarily.

After the nesting season is over, the cats are able to do less damage. One way to protect the birds from cats is to place bands of tin, flaring out at the bottom, around the trunks of trees containing nests and around posts on which there are bird houses.

Vases, statues, gazing globes and Japanese lanterns are other accessories often used. The two first named are found most often and most appropriately in formal or semi-formal gardens. There is no excuse for littering the lawn with figures of dogs and lions and babies, and happily the practice is less common than formerly. It should be banished entirely, along with that of making flower beds to resemble stars and crescents and crosses. Even the once-common grotesquely figured fountains are losing their popularity.

Gazing globes are interesting and amusing at all seasons, even in winter, presenting the garden to the eye in strange aspects, as they do. They are

not cheap, however, and only occasionally seen.

The Japanese lanterns are strange stone affairs, well-proportioned and rather attractive when inconspicuously placed. Of course, they are always found in the Japanese gardens now so much in favor, but often are used elsewhere as well.

In simple gardens, much may be done with cedar posts at slight cost. It is a simple matter to make pergolas and arbors of these posts, and they may easily be fashioned into rustic seats, different sizes being employed for different pieces. It is always best to cut the posts in winter, when this can be done, as then the sap is not running and the bark clings to the wood more firmly. Winter cutting is by no means necessary, however. When poles are to be set in the ground, it is well to peel the part to go into the earth and to paint it with creosote or some other preservative material. Then it will last for a long time. Thus it is that all gardens, large or small, may be furnished in some fashion and be the more attractive and inviting because of it.

A Bungalow "Court" in Pasadena

By Kate Randall

THE court fills a place between the real house and the apartment, is more homelike than the latter and a blessing to those who are too busy to have the care of their own grounds, and too fond of air and sunshine to be satisfied with the dark, cramped apartment.

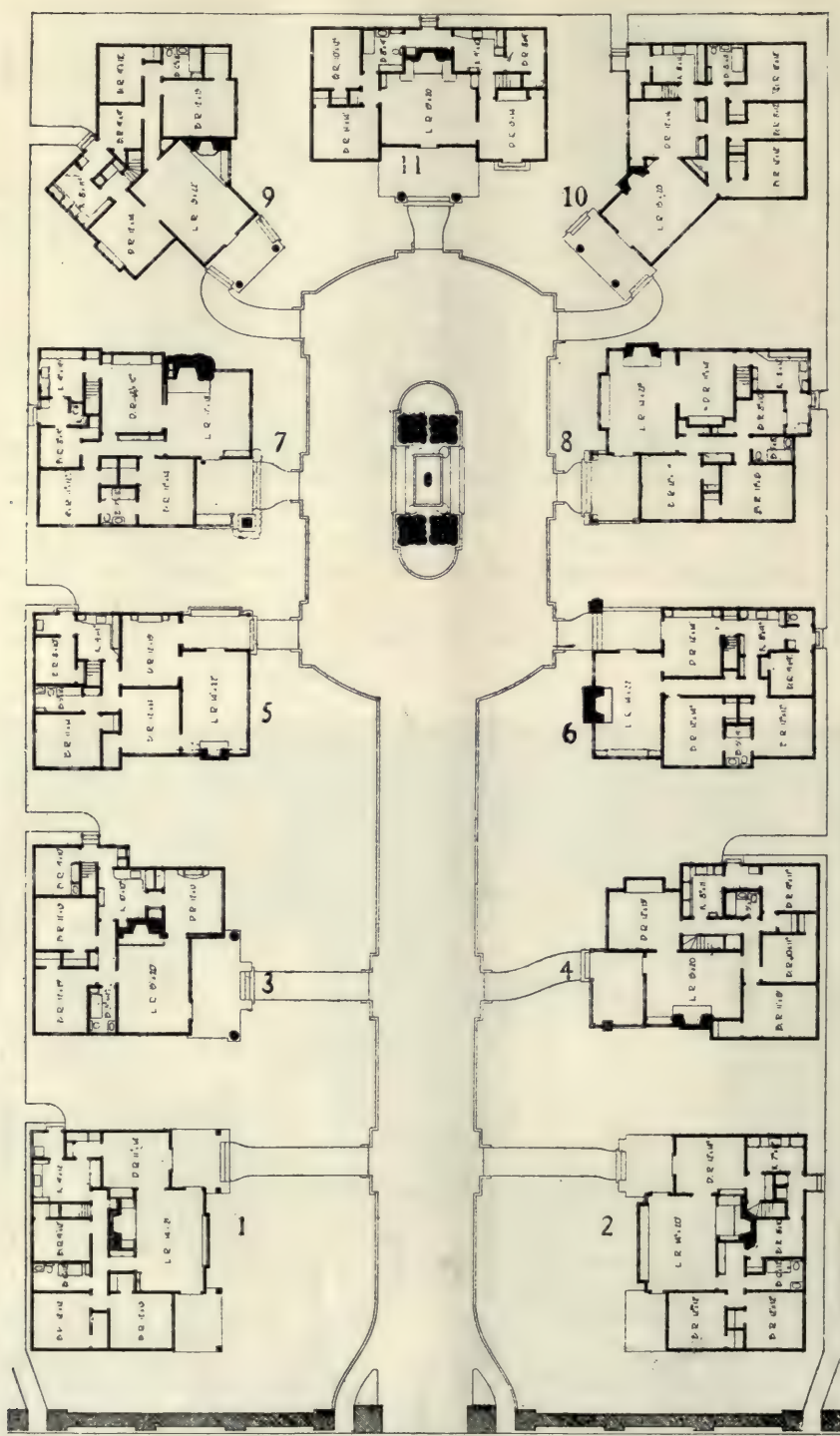
Where one owns a frontage of 150 to 200 feet, with a depth as great, and particularly when one has lots on two streets, forming a right angle, very charming courts may be planned, with an entrance on each street. In the best examples the pretty one-story houses range in size from three rooms and a

bath, to five or six. They are built facing each other, on each side of a garden space, say fifty feet wide. This gives room for a broad central walk and a green turf with shrubs, vines, and flowers in front of each cottage. These tidy bits of green are very restful and homelike, and are kept in order by the owner.

In the rear of the homes there is generally only room for a wide walk next the fence. The cottages are not sold to different owners, but are held as a whole and rented just as apartments are rented. Some of the courts are very simply furnished. Others have handsome stone or brick walls with attractive entrance posts,



VILLA COURT, WITH SOME THIRTY LITTLE HOUSES AND A TEA HOUSE AT THE END OF THE CENTER WALK.



PLAN OF VILLA COURT.



ST. FRANCES COURT, WITH BUNGALOWS FACING A BROAD CENTRAL DRIVE.

with lanterns and the central walk is well lighted.

Villa Court has, at the extreme end of the long walk, a very charming little "Tea House," with a wide fireplace, easy chairs and small tables, and, as I understand, is for the general use of the tenants of the cottages, which are fully furn-

ished. There are some thirty of these little houses, as it is an angle court.

One court I have seen has a central heating plant and steam heat in each cottage, and all have open fires. In some of the furnished courts all heavy work, such as the regular vacuum cleaning and window washing, is done by the owners.



ONE OF THE BUNGALOWS IN THE COURT.



THE "COURT" IDEA AS CARRIED OUT IN CHICAGO.

Interiors are very charming—quite a large living room and dining combined, with high wainscoting and beamed ceilings—while bed rooms and bath, curtains and draperies of chintz seem particularly well adapted to these houses and come in fascinating array, making any color scheme possible.

Many, here in California, have the Navajo Indian rugs and blankets as the key note, and quaint Indian baskets and pottery for decorations. One little home had a dutch blue scheme throughout, and beautiful blue and white treasures from foreign lands. Then homes of still another court were built of concrete with red tiled roofs.

For a more vigorous climate, the court illustrated, composed of small brick

houses, is a most suggestive scheme. Brick, even for small dwellings, seems coming into favor by leaps and bounds. It has been used in this evolution of the court idea, by Chicago capitalists, on quite an extensive scale. The small brick cottages are set close together, on each side of a broad street, extending through the entire block. A handsome, ornamental gateway of brick pillars and wrought iron makes an effective entrance feature at each end of the court, and distinguishes it from the surrounding neighborhood. It gives a sort of eclat to these cottages, so that they are always in good demand.

There is really no end to the artistic combinations that will suggest themselves in working out similar schemes



How We Solved a Problem in a Remodeled House



WE came into possession of some property in a western town consisting of several lots on a good street. On one of the lots the former owner had built a large and rather good frame house, but in the peculiar style of some of the houses of the mid-

tery" on one side and kitchen and dining room on the other.

The house was in excellent condition, far too good to tear down, and besides it had its good points. We thought we could see possibilities of rather an interesting dwelling. There were fine trees



THE HOUSE BEFORE REMODELING.

dle south of fifty years ago, with basement living rooms, and "parlors" on the second floor. A long flight of steps led up to a portico or "gallery" with a flat roof and cornice supported by attenuated posts terminating in scared little capitals. Here was the main street-entrance, a broad mahogany door, rather stately with a circle "fan-light" above. Underneath this long flight of stairs were arches leading to the basement entrance in common every-day use. A small stairway led up from inside the door to the rooms above; with a bedroom and "but-

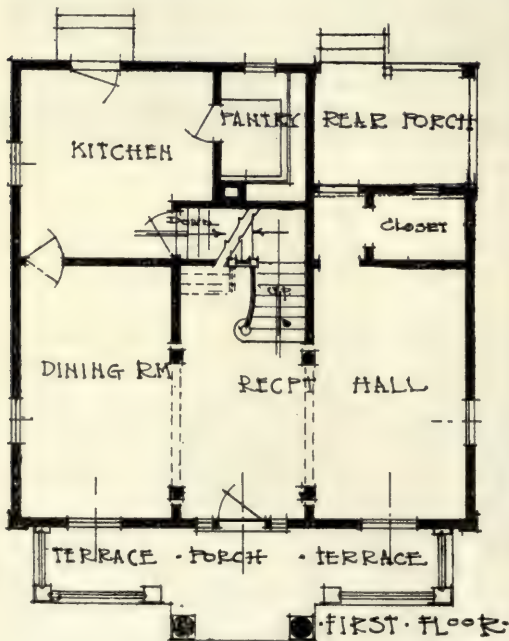
for a background against which the white frame house, with its hints of the formal stateliness of another period, looked rather fine, reminding one of the starched magnificence of white shirtfront of some of the old "Massa's, befo' de wah." There was a fine lawn, shrubbery, and vines, to which the modern fads of pergolas and flower boxes had been added.

We decided to remodel the front of the house, both outside and inside, but to preserve the old-fashioned "feeling" with its hint of the southern sixties. A



AS IT IS WITH THE IMPROVEMENTS CARRIED OUT.

mere outline sketch is given of the interior changes, as the original floor plans were unavailable.



Not for anything would we have laid profane hands upon the high windows with their arched caps; nor upon the "cupola" crowning the roof, for it was really graceful; nor upon the stately "front" door. But we did tear away the front steps. We wished to keep the gallery or balcony above, upon which the old front door gave from a broad hall within. So a heavy cornice with a railing above was supported by broad pillars, the lower floor extended out on each side beneath the windows and enclosed by a low railing. The old lower windows were broadened and this terrace-porch made a pleasing feature as well as an ideal place for sitting. Two tall, stately pillars in front of the balcony were carried up to the top of the second story to form a portico, with a heavy cornice and architrave above.

Within this portico, a broad door with side lights, opens into a wide reception

hall on the ground floor, with a new, broad staircase rising in the center of it and leading up to the parlors above. The dining room and kitchen have been kept upon the ground floor, but the effect of the handsome staircase, with columned openings on either side, is very good. This portion of the house has been decorated and furnished in modern style, a scheme of golden browns running through hall and dining room which is in excellent accord with the cream trim and columns.

The rooms above have been kept as nearly as possible as they were, as the quaint but effective treatment of the large

double parlors, with their lofty windows, ivory woodwork and rich crimson carpets and furnishings, appealed strongly to the fancy of the new owners. Only the library and two sleeping rooms have been refurnished to suit more modern ideas.

Perhaps an architect would find things to criticize in our attempt at remodeling. Perhaps he would point out that the square posts supporting the balcony, are much too heavy for the size of the balcony and that they do not match up either with the pilasters on the angles or the Corinthian columns in front. But the general public cares naught for such trifles, and neither do we.

Artificial Daylight for Color Matching

By Robert French Pierce



HEREVER discrimination between or matching of colors is necessary, there are often deceiving and sometimes almost unbelievable errors introduced by the light by which the colors are viewed. Not only do all the artificial lights, no matter how white they may appear to the eye, distort colors from their so-called "daylight" values, but the north-sky itself, the most uniform of natural light sources, is notoriously unreliable.

A match made under a cloudless north-sky may, with some delicate colors, prove far from a match under a cloudy sky. Furthermore, the modifications of north-sky light introduced by reflection from green foliage, red brick buildings, etc., often prove so deceptive that a match made in one portion of a plant may not be duplicated in another.

This deficiency in natural light is per-

haps best understood, because most plainly in evidence, in the dyeing of textiles in which delicate and complex dyes are used, but lithographers, engravers, printers, color-grinders, paper makers, etc., often find that even with the less sensitive mineral pigments the sky is by no means a dependable light source for color matching.

No less frequently is the purchaser of dress goods, printed matter, stains, paints, etc., disappointed over the results of matching samples under artificial light, or under daylight distorted by reflections from surrounding buildings, etc.

While it is true that not all fabrics or colored objects are to be worn or displayed under daylight or even under approximately white light, it is obvious that matching may be best done under the particular kind of light originally used by the dyer or color maker. Subsequent

estimates of the appearance of the fabric or object under any artificial light may be made under the particular light required, but this operation is far more deceptive than is usually supposed. For instance, it might be thought that material for a ball-gown might well be matched under electric incandescent light, but if the match be made under tungsten lamps in a store, and the gown be worn in a ball-room lighted by small, low efficiency carbon filament lamps, such as are often

etc., but these only serve to cause the material to display the same hue under light of the same composition.

It should be clearly understood that it is the composition, not the color alone of the light, that is of importance. Similarity of color does not necessarily imply similarity of composition. For instance, the composition of sunlight, or white light from the calcium light or the open electric arc, is quite different from that of white light made by the mixture of red, green and blue light.

If we split sunlight up into its component parts or spectrum (Fig. 1) by means of a glass prism, we see that this spectrum is a continuous band containing seven colors, violet, blue, indigo, green, yellow, orange, and red, each shading almost imperceptibly into the adjacent ones. If, however, we split up in the same manner, a white light made by mixing red, green and blue light, we obtain the spectrum shown in Fig. 2, containing only three narrow lines. If sunlight be thrown upon a surface which absorbs red rays only, the spectrum of the reflected light will be identical with that of the original light, except that the red portion will be lacking (Fig. 3). If the same surface be illuminated by a white light made by mixing red, green and blue light, the resulting spectrum will contain only the narrow blue and green bands (Fig. 4). Since it is the composition of the light entering the eye that determines the color perceived, it is possible for a fabric to appear of one color under one kind of white light, and of quite another color under a white light of different composition.

To match colors under artificial light so that they will also match under daylight, it is necessary to provide artificial light having the same composition as daylight.

No ordinary commercial source of artificial light produces a light even remote-



Fig. 1



Fig. 3

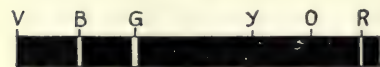


Fig. 2



Fig. 4

used for decorative or artistic lighting effects, the result is apt to be anything but pleasing.

Since manufacturer, retailer and user of fabrics and materials in which color is an important feature have long suffered from the lack of an artificial light duplicating daylight and at the same time eliminating its unreliability from the standpoint of color, it is believed that a description of a new and successful solution of this problem will prove interesting.

The color of a fabric or other material, as apparent to the eye, depends upon two things—the composition of the light by which it is illuminated and the property of the material itself of absorbing light rays of certain colors. The latter may be controlled by the use of paints, dyes,

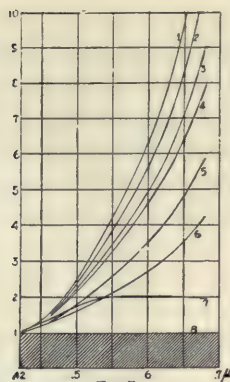


FIG. 5.
Curves showing amount of spectra of various light sources which must be absorbed to give white light. Shaded area - White Light.

1. Glow lamp, carbon, 485 watts per MSCP.
2. " " " 375 " " "
3. " " metallized 3.1 " " "
4. " " tantalum 2.6 " " "
5. " " tungsten 1.58 " " "
6. Acetylene
7. Welsbach mantle 3/4 % cerium
8. Daylight

ly approaching daylight in composition. This may be readily seen from Fig. 5, which shows the distribution in different portions of the spectrum of light from several well-known artificial light sources. The incandescent gas lamp, the incandescent electric lamp, and the acetylene flame contain all the colors found in daylight, but in vastly different proportions. Others, like the mercury vapor lamp, emit light containing but one or two colors. As practically an infinite number of color gradations or shades are present in daylight, the duplication of daylight by mixing together various colors of light separately produced, is quite impracticable.

The other expedient is to utilize some artificial light containing all the colors present in daylight, absorbing or filtering out the excess of different colors above the proportions in which they are found in daylight, so that the remaining light will be an exact duplication of daylight in composition and hence in effect.

It would appear from the curve that only 80 per cent of the light from the Welsbach mantle would thus require absorption to bring the remainder to day-

light composition. It is not possible, however, to absorb the excessive or undesirable rays alone without also absorbing a certain portion of the rays in which the light is already deficient, and for this reason the practical use of this method involves a sacrifice of 90 per cent of the total light produced. With other artificial light sources, however, even a greater proportion must be wasted so that the Welsbach mantle is by a large margin the most economical means of producing artificial daylight.

The light from both incandescent electric lamps and incandescent gas lamps varies considerably in composition according to the material used. In the gas mantle particularly light ranging in color from purple at one end of the spectrum to red at the other may be obtained by varying the proportion of ceria. The efficiency of light production varies at the same time.

Since all absorbing screens which filter out the excessive amounts of red, orange and yellow rays also absorb to some extent the blue and violet rays in which the artificial light is already deficient, it is desirable to start with as close an approach to daylight as possible, thus reducing the amount of absorption neces-

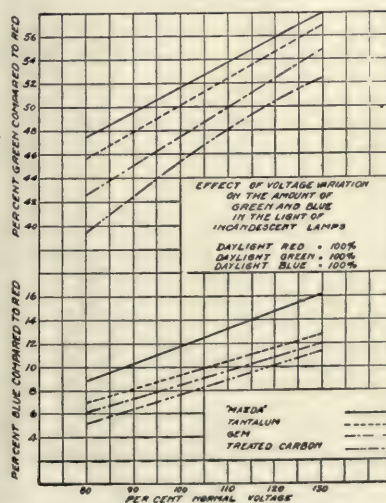


FIG. 6.

sary and conserving the small amount of blue and violet light present in the original light. Colored screens for absorbing different colors of light may be made of properly colored glass, or of clear colorless glass bearing a film of gelatine containing properly selected dyes. Colored glass is almost impossible to secure of sufficiently uniform thickness and quality. On the other hand, no dyes available will absorb or filter out the long dark red rays which are present in great excess.

The best results are therefore secured by first filtering the light through a screen of blue-green glass to remove the excess of long red rays, and then passing it through a second filter of dyed gelatine carried on a plate of colorless glass to remove the excess of other rays remaining. Since the composition and density of the dyed gelatine film is easily controlled, exact correction may be made of any non-uniformity in the blue-green glass screen with which it is "paired." This "pairing" is performed by spectro-photometric analysis of the light passing through the two screens, and comparison with the spectral distribution of average daylight as previously determined. The resulting light is identical with average daylight. It is only by means of these highly refined methods that a reliable and uniform light for color-matching may be produced.

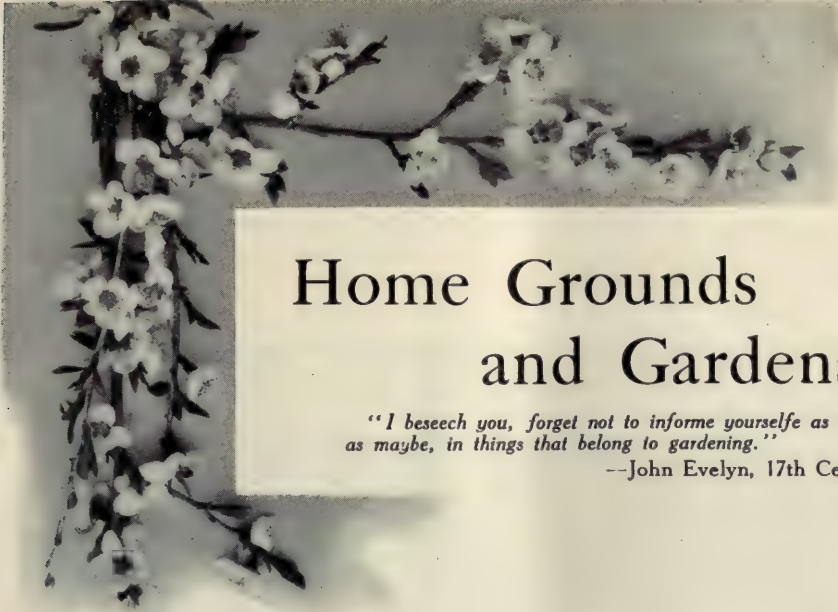
The first successful practical application of the absorption method of producing artificial daylight was made by Dr. H. E. Ives, who carried the difficult and laborious research and experimental work upon which the solution of the problem depended to a commercial satisfactory conclusion. The results of his early experiments were embodied in practical form a few years ago in an arti-

ficial daylight producer utilizing the Tungsten lamp as the original light source. Later research indicated the possibility of a closer approach to average daylight than was obtained with the earlier device, and the results of his recent investigations have been applied to the construction of a device in which the faults of the earlier apparatus are eliminated, and which may be used either with the Welsbach gas lamp or with the Tungsten electric lamp, the only difference being in the dyes used upon the second screen.

The gas mantle is preferable to the electric source, however, since the light from the latter changes in composition with burning and with different voltages, while the gas lamp suffers no changes of a corresponding nature.

The Welsbach mantle is of a special composition which maintains a uniformity in the color of light emitted throughout life, and is in itself a much nearer approach to daylight than any other artificial incandescent light source. This reduces the loss of light through absorption—a very important matter, since even with this mantle, it is necessary to absorb 90 per cent of the original light. Since the resulting artificial daylight is comparatively expensive at best, the desirability of utilizing economical light sources with which the least loss through absorption is attended, is obvious.

A further advantage of the use of the Welsbach mantle lies in the fact that different mantles may be furnished which in the same apparatus enables an exact duplication of either average north-sky light or direct sunlight. By this means the variation in hue or match between these two extremes of daylight may be determined without dependence upon outside weather conditions.



Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

—John Evelyn, 17th Century.

Growing An Ornamental Hedge



WELL kept ornamental hedge adds a charm to the cottage or mansion; and is equally useful on the city lot or on ample suburban or country grounds.

There are a number of hedge plants, but the most popular are the California privet and Japanese barberry. Privet makes the best foliage, but the barberry adds to its foliage a bloom that is beautiful to look upon.

When you have selected the ground and determined on the variety of hedge plant to use, dig a trench two feet wide and well into the subsoil along the proposed line of hedge. Fill this trench nearly full of a mixture of earth and rotted stable manure.

When ready to set the plants cut back every one of them to within three inches of the ground. If a wide, dense hedge is desired, set them in double rows eight inches apart, with the plants the same distance apart in the row. Set them so that

the plants will not be opposite in the rows, but will alternate; thus giving them more room.

Give the plants the proper cultivation, and allow them to grow without pruning during the summer. When growth is finished in the fall, again cut back to within eight or ten inches of the ground, shortening all side—or horizontal—growth to within an inch or two of the main stem. During the second summer, the hedge may be partially shaped by pinching out the stronger upright shoots, but preserving every shoot on the weaker sides. This summer pruning is very essential in giving to the hedge breadth of base and compactness of form. During the following winter the hedge may be trimmed into the desired shape, which is presumably that of a pyramid.

This method of pruning is in accordance with the principle that summer pruning will arrest growth of the shoot that is pinched back, while winter pruning tends

to encourage strong growth. By keeping these facts in mind, one can keep a hedge in proper form without sacrificing much of the growth; but if the upright shoots are allowed to predominate, the lower side shoots will lose vigor, and the hedge will thus lose much of its efficiency and beauty as an ornamental barrier.

How We Made a Winter Garden on Wheels.

Our "show piece," all last winter, was a plant box that the children made in

being wheeled out on the porch, on sunny days, for a sun and shower bath.

—C. A. S.

Fragrant-Leaved Window Gardens.

One of the most interesting sort of window gardens is that composed of plants with fragrant leaves that give off the living perfume whenever they are touched. Such a little garden may readily be made in a window-box, either inside or outside, and will prove its value.

Nearly everyone is familiar with the



A LOW HEDGE OF BARBERIES OUTLINING THE LAWN.

the spring for their playhouse, because they wanted to do something in the flower raising line when they saw their parents at work in the garden. A discarded wash boiler was put into an old metal-box toy express wagon, where it just fitted. The boiler was half filled with fertilizer from a cowyard and rich soil put on top. Giant nasturtium seeds were planted, and the vines soon covered boiler and wagon. It was easily wheeled from place to place and when winter came was rolled into the dining room where it retained its beauty all winter,

fragrance of the rose geranium, but comparatively few people know that there are many other scented-leaved geraniums. One of the best of these is the mint-leaved geranium which has a pungent perfume much like peppermint. Its leaves are beautifully curved and have their surfaces covered with fine hairs, giving the plant a very distinctive appearance. It thrives in a window-box and is one of the most satisfactory plants for such use. The apple-scented and lemon geraniums are also good for this purpose.

Selecting Seeds.

For a sunny exposure, the California poppy, *eschscholtzia*, will endure mid-summer heat and drought without flinching. The colors vary from pure white through yellow and orange to scarlet, with the satin sheen peculiar to the poppy tribe, while the foliage has a whitish cast which is especially in harmony with the blossoms.

If you wish to conceal the garden fence plant sweet peas or a row of hollyhocks.

Portulaca is fine for covering a sunny spot, the succulent foliage being a most successful resister of drought.

The calliopsis is showy when grown in masses, the long, slender stems rendering it admirable for cutting.

The branching varieties of aster are preferable to the compact sorts. Laven-



FRAGRANT-LEAVED GERANIUMS AND FOLIAGE PLANTS IN A WINDOW GARDEN.

For a boutonniere there are few blossoms which equal the old-fashioned bachelor's button in white and the various shades of blue. It has the happy faculty of keeping fresh for hours, and of never becoming unsightly, even when wilted.

For rapid growth, the kudzu vine excels, well established plants sometimes attaining a height of fifty feet in a single season, and furnishing a dense shade. If grown from seed, ten or twelve feet is perhaps the limit the first season.

The calendula will endure more frosts without complaint than any other annual, offering a pleasing variety of the different shades and combinations of yellow.

der and white make a charming combination, while pink appears without a rival for third choice.

A Novel Hanging Basket.

A novel hanging basket is a large-sized funnel, painted moss-green, and filled with quick-growing vines. It hangs from the branch of a tree by a dark green raffia cord, which is fastened to another twisted around the edge of the funnel and kept in place by the weight of the latter. The open end allows an excess of water to escape; and the vines thrive so well that within a short time after planting the original funnel was completely hidden.

The Back Yard Studio of a Well-Known Artist



The Entrance to the Back Yard Studio.

THE exodus of artists from city studios to suburban and country places continues to grow larger, especially among those who find their best inspiration in outdoor surroundings. Philip R. Goodwin, painter and magazine illustrator, has chosen a suburban back-yard for the site of his simple but attractive workshop of inexpensive stucco construction.

Besides the workroom, the studio contains a dressing room and a small storage loft. It is located at Mamaroneck, N. Y., twenty miles from New York City, and Mr. Goodwin finds the arrangement almost ideal.

The first picture shows the very unusual construction of the great storm chimney roughly laid up in heavy mortar, with the quaint quarter-circle windows for the storage attic in the gable. We get a glimpse of the front door innocent of all elaboration, plainly an entrance merely, yet with a touch of artistic feeling which is most evident in the full view of the entrance with the artist standing there.

Even the rear of the little studio is full of interest and faces to the north to give

the north light in the studio that artists love. To the south there is a view of a pleasant bit of woodland, and the steep roof of the studio is overhung by the sweeping branches of a great elm. One could scarce believe that such a rustic setting could be found in the heart of Greater New York. The little studio is most suggestive of what can be done in the way of artistic living if one but has imagination to see the possibilities in apparently barren situations.

Many and various are the solutions of the back-yard problem, but it remained for an artist to solve it by making his back-yard a site for his studio. Not only has he thus saved a lot of money in rent, but he has imparted that indefinable atmosphere of domesticity to his business



The Simple But Effective Stone Chimney.

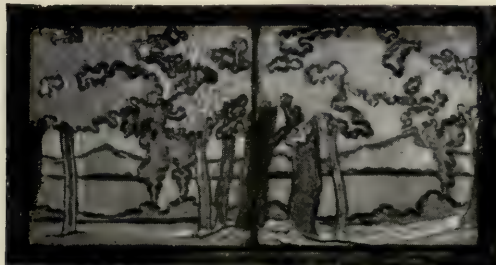


THE WORKSHOP.

quarters, which is more and more coming to be considered desirable.

Even large commercial buildings now receive many "touches," which once were supposed to belong strictly to domestic life. Witness the decoration of store and office buildings in some of the large cities, notably Minneapolis—with window gardens and flower boxes, and the planting of

shrubbery against their walls. In Pasadena, Cal., the location of physicians' offices and artists' studios in semi-domestic situations, surrounded by flowers and shrubbery, has long been a civic feature. But that is the land of flowers, and the approach of the same spirit in commercial New York, takes us with some natural surprise.



Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

- B 445 CHAS. S. SEDGWICK, Minneapolis, Minn.
 B 446 JOHN HENRY NEWSON, Cleveland, Ohio
 B 447 KEITH'S ARCHITECTURAL CO., Minneapolis

Design No.

- B 448 A. C. CLAUSEN, Minneapolis, Minn.
 B 449 NATIONAL FIREPROOFING CO., Pittsburgh, Pa.
 B 450 F. E. COLBY, Sioux City, Iowa.

Design B445.



HE general character and style of home we are illustrating is right in line with much of the old English type of building. Many of these homes are seen throughout England and they are growing in number in this country. It has the feeling and general style of the "Ann Hathaway" cottage in the treatment of its roofs, cornices, etc. The construction is the same as our modern cement houses, or built with metal lath on wood sheathing and cemented with a rough "pebble dash" on the exterior.

The house sits low to the ground and the stories are 8 feet 6 inches and 8 feet in height and the cornice brought down low. It has the broad appearance, with a front facade of 40 feet, exclusive of the piazza, at the right side, and a depth of 25 feet. Basement is full and complete under the entire house, the foundation being concrete and the exterior cement on walls carried down clean to the grade line. A house of this character requires ample grounds and is well suited to a rural location, with plenty of trees and foliage about, it has a quaint and home-like appearance. It is estimated to build this home, exclusive of heating and plumbing, in the manner herein described, for \$5,000.

The entrance is through a liberal vestibule to a central hall, with platformed stairs leading up in front at the left of the vestibule, and underneath is an ample coat closet; there is a large window on

the stair platform lighting the hall. At the right of the entrance is the main living room, extending across the end of the house, 14 feet in width by 24 feet in depth, with projected window at the side and seat, and a wide fireplace in the center of the room. The chimney is projected and shows on the outside, and the same at the opposite end, where it is carried up through the gables and forms a feature of the front. The living room connects with the piazza at the side with sliding French windows. The dining room connects through living room with wide columned arch, and also with main hall, opening the main floor up well together. At the left end and on the main front is a small den, 8x10 feet, with a fireplace, and back of same is the rear stairs, entirely separate from the main house and extending from basement to attic. The kitchen and culinary department is complete in its appointments. The main floor is designed to be finished in oak, natural or stained, to suit wishes of owner.

The second floor has five good bed rooms, three of which are for the family use and a door connecting the main hall with rear hall cuts off the two servants' rooms, making that portion separate and distinct from main part of house. The third floor has ample space in which to finish rooms if desired. The finish of second floor is designed to be in white enamel with red birch doors and natural birch floors.

The roofs are to be shingled and



DESIGN B 445

Chas. S. Sedgwick, Architect.

English Type of Design in Cement

stained. The use of tile on the roof would add very much to the value and appearance of the house, but would also add \$500 to the cost.

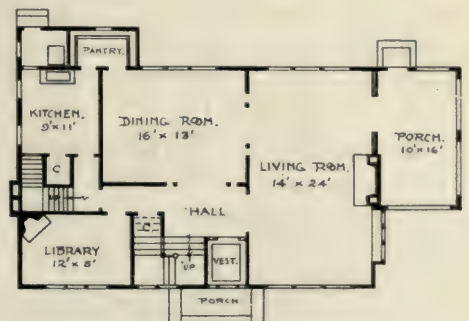
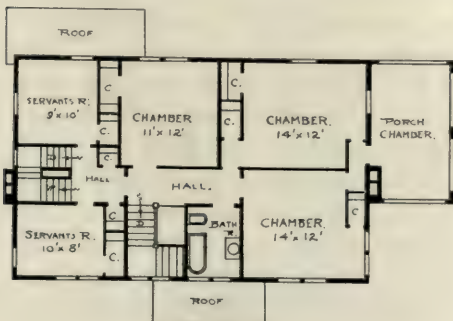
Design B446.

A very simple but striking design in cement plaster over hollow tile, a construction that is growing in popular favor. A front view gives the impression of a large house, as the living room, dining room and sun parlor occupy a width of 44 feet across the front. The depth is shallow, only 21 feet exclusive of the kitchen extension in the rear. This extension may be carried up to give another bedroom on second floor. This house was designed for a lot having 80-

foot frontage but only 60 feet depth. The appearance of the house would be improved if lower studding were used, reducing the height.

There is a compact arrangement of rooms on both floors, with excellent closet accommodations, sleeping porch, etc. The foundation is concrete, with brick above grade. The house can be built for about \$5,000, including hot water heat, full plumbing, laundry and vegetable rooms in basement, oak floors and hard wood trimmings on first floor, white enamel in second story.

This cost could be somewhat reduced and still preserve the general features of the design.



Design B447.

This house was designed with special reference to plenty of sunlight and fresh air. For extreme weather in our northern climate it would hardly be practical to have quite as many windows unless sufficient heat radiation was installed to take care of the unusual amount of glass surface.

The large vestibule is at one side of the entrance and if equipped with sash, would make an ideal sun room as it could be entered from the living room through French doors.

The arrangement of the exterior is rather unusual, especially the stairway, which is accessible from the living room, den, or kitchen. By going through the small rear hall the one stairway can be used, and, this being enclosed, reduces the cost to a minimum.

The living room is good size and contains a built-in fireplace with book cases. The dining room is in front and also has plenty of windows, with a buffet and china closet extending the entire length of the room. There is no pantry, the kitchen having plenty of closet space and built-in cupboards. The stairway to the basement is from the rear entry, this being a substitute for the grade door which is otherwise indispensable. The basement provides for hot water heating plant, laundry, fuel, and vegetable room.

On the second floor are three large, well lighted chambers, the one over the living room having an open fireplace. The closets are numerous and unusually large. A good sized sleeping porch could be built over the den which could be reached from the hall without going through any of the chambers.

There are hardwood floors throughout with hardwood finish in the living and dining rooms, fir in the den and hall, with birch or pine for the second floor, stained or enameled.

The exterior is of rough-sawed 8-inch

siding up to the second story sills, stained brown, with cement plaster above, tinted a light tan, and shingle roof, stained a cigar brown.

It is estimated that this house can be built complete as described, including heating and plumbing, for \$5,000.

Design B448.

A cottage design in cement plaster, with steeply sloping roof, reminiscent of English cottages. The exterior is white cement over metal lath, on frame construction with a brick foundation. The floor plan is very complete, with almost every desirable feature of a large house. The living room, 20x15 feet, has a beamed ceiling with alcoved stairway going up on one end and a fireplace at the other. The dining room ceiling is also beamed and with the extensions of bay window and built-in buffet, of ample size. The kitchen is so well equipped with cupboards, work table, etc., as to render a separate pantry superfluous.

The steep roof and large dormer affords three excellent bedrooms, with good closets, bath, etc. A full basement with laundry, etc., is provided. The estimated cost of \$4,500 includes hot water heat, plumbing, hardwood trimmings and floors.

Design B449.

Here we have the true bungalow type in an extremely fetching design.

The exterior walls of rough pebble dash cement over Natco hollow tile, with shingle roof in low, broad lines, with deep sheltering eaves. The narrow casement windows, the pergola-roofed entrance, the broad, low chimneys with quaint arched openings in the true Oriental style—all are in harmony with cypress trees and oleanders, and form a pleasing and sympathetic expression of the bungalow idea in design.

Nor are the practical features wanting. There is a basement under the main portion of the house, containing laundry and



DESIGN B 446

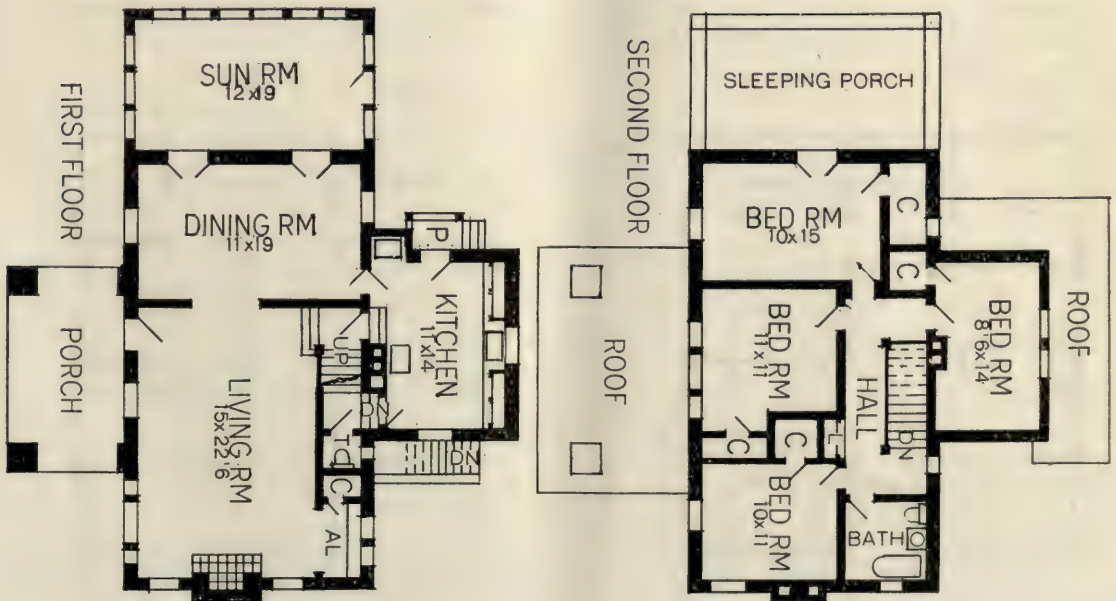
John Henry Newson, Architect.

An Unusual Design in Cement

fuel rooms, also a hot water heating plant, for even bungalows in the southlands require heating facilities for real comfort. Tile floors are included in bath and toilet rooms, sun parlor and porch, hardwood in balance of the house. An unusual and

desirable feature is a maid's room adjoining the kitchen, with a separate outside entrance.

This very complete design was one of those submitted in the Brick Builders' Prize Competition for a \$6,000 house.





Keith's Architectural Co.

DESIGN B 447

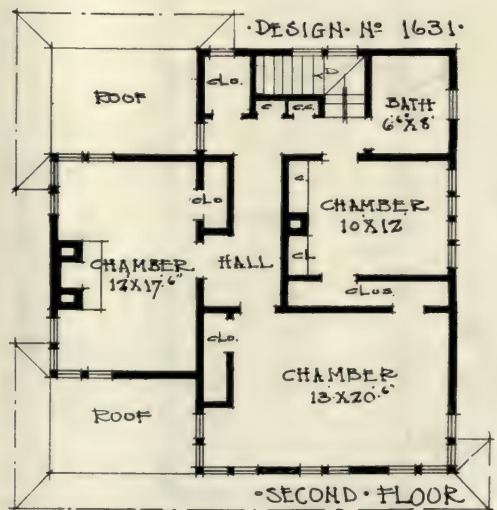
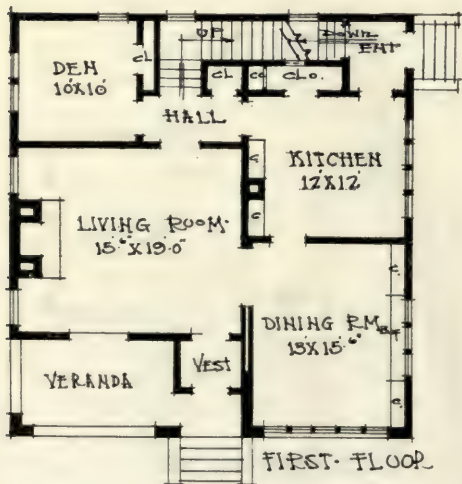
An Exceedingly Practical Design in Cement and Rough Siding Stained

Design B450.

We have another contribution this month from a well known architect, F. E. Colby. It is a design for a plain frame, two-story house with four dormer treatment to the roof. This would make a first-

class house to build for investment. It is 28x38 on the ground with full basement which is 8 feet in the clear.

The first story height is 9½ feet and the second story 8 feet 3 inches. Interior finish of the first floor is red oak and

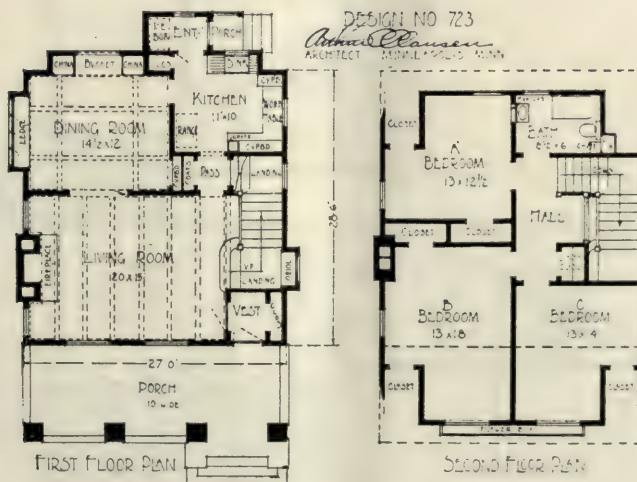




A. C. Clausen, Architect.

DESIGN B 448

An English Cottage in Cement





Courtesy of Nat'l Fireproofing Co.

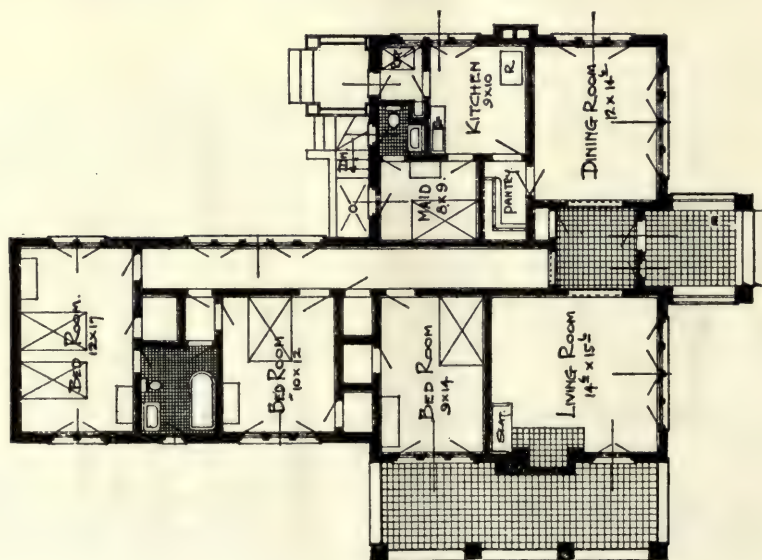
DESIGN B 449

A "Natco" Hollow Tile Bungalow

that of the second floor yellow pine. The floors are quarter-sawn oak.

The owner, in building the house as shown by photo, had the plastering left

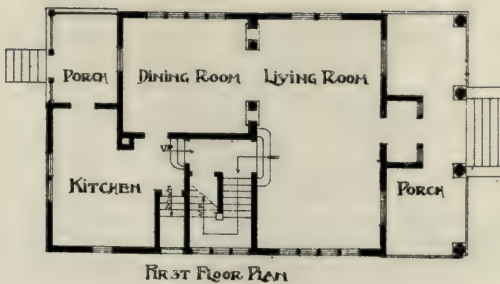
in the rough coat for tinting. The house is equipped with modern plumbing and was recently built complete for \$4,500.



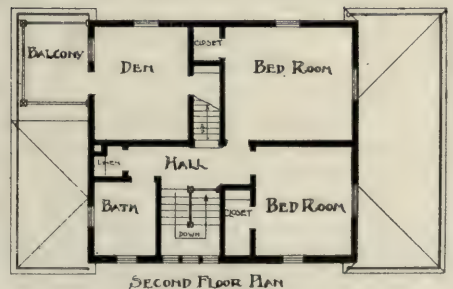
*F. E. Colby, Architect.*

DESIGN B 450

Two-Story House with Dormer Treatment



FIRST FLOOR PLAN



SECOND FLOOR PLAN



Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

Prevalent Color Schemes.



AFTER all these years of the excessive devotion to green in all its shades, it is a comfort to note the popularity of brown of varying tones and also the revival of colors long disused like mulberry and some shades of old rose. Among expensive materials there are beautiful tones of mahogany and of tawny orange deeply shadowed with brown. There is also a good deal of blue, the dull shade called Louis Quinze, and in brocades this is often combined with a tone of what was once called drab, which might be described as ashes of roses without the pink tone. The fancy for the violet shades continues and in clever hands the effect is very good indeed.

The Use of Mulberry.

Mulberry is really a dark tone of old rose, but of old rose with no suggestion of yellow. As yet it is not found to any great extent in wall papers, except the most expensive imported kinds, and the few medium priced ones are not specially pleasing. The best of them copies Japanese grass cloth in its suggestion of texture, and has a shadow pattern outlined on it in dark sepia, like Indian ink. Such a paper would look well in a hall above a paneled wainscot in dark wood, but the color is rather overpowering for the walls of a large room.

A better use for it is in a room with grey walls, white woodwork and mahogany furniture, in which a mulberry brocade can be used for a single large armchair and perhaps for the seats of one or two side chairs and for a square or oblong for the top of a table, while the rest of the furniture is upholstered with old rose

velour or cotton velvet. With a Kashmir rug repeating the old rose in combination with low toned blue and dull green, and prints or mezzotints in color on the walls you have an excellent color scheme for a handsome room.

Bric-a-Brac in the Color Scheme.

The time has passed when anything in the way of ornament would pass muster, and one saw everywhere a meaningless jumble of little pieces of china and pottery, of all qualities and of all colorings. Now we try to have a few things and to have them good and more and more people realize that one large piece is better than several little ones. In a colonial parlor of good size a pair of Chinese vases, say two feet high, does wonders in accentuating the room. In some rooms blue and white are the best choice, in others those which blend a good many different colors. A very good looking Chinese vase in large size can be had for twelve dollars, and if chanced upon second hand for considerably less. One very charming kind has a ground of the deliciously soft, neutral, powder blue, with medallions on either side of white with colored flowers. The beauty of buying Chinese porcelain is that one never goes astray with it. It does not seem to have been commercialized like Japanese art, which caters so much to European taste, even to the extent of reproducing the heads of powdered grande dames of the eighteenth century on plates with characteristically Japanese borders.

One can find Chinese porcelain to fit almost any color scheme. There are lovely tones of rose red combined with greyish white crackle for the old rose room, if one does not care for the contrast of powder blue which made the



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Architects find descriptive details in "Sweet's Index," pages 1004 and 1005.

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drawing room of the heroine of *Adrian Savage* so delightful. The clear Chinese yellows are delicious in either a blue or a green room, as are the white porcelains with a decoration of dragons in green, while for the blue and white room there is always the choice between Nankin or blue Canton.

For the Plate Rail.

The writer holds a brief for the plate rail, with the proviso that it shall be set far enough below the ceiling to be within reaching distance. The presumption is that the plates are occasionally used and there is an inherent absurdity in arranging them on a shelf eight feet above the floor.

The plates should have a certain decorative quality and be of a design which can be recognized from a distance. Chinese or Japanese plates in strong colors are invaluable when they carry out the color note of the room. So are some of the peasant potteries, and they have in the Italian shops plates with a decoration of various fruits which are extremely effective.

Cushions for Wicker Furniture.

Sets of natural wicker are shown with loose cushions of the black and white cottons designed by the German secessionists. They look cool and might be effective on a piazza with porch boxes filled with nasturtiums and geraniums, with Moodj rugs in red and black. Other furniture in the natural color is cushioned in cretonne with large, closely covered patterns of bright colored flowers on a cream ground, or with the very French looking black grounded cretonnes. These latter, by the way, make beautiful unlined lamp shades, the light shining through and bringing out the vivid colors of the pattern.

Brown wicker is sometimes cushioned in brown Craftsman canvas or in monk's cloth. The former is preferable, as the monk's cloth is very linty, and is better adapted to hangings than to cushions. One very handsome set of brown wicker furniture was cushioned with black cretonne, with a wistaria pattern in tones of yellow. Both brown and green furniture look well with covers of the cotton

taffetas, which has a closely covered design of leaves and fruits in stained glass colors.

Lettuce Leaf and Celadon.

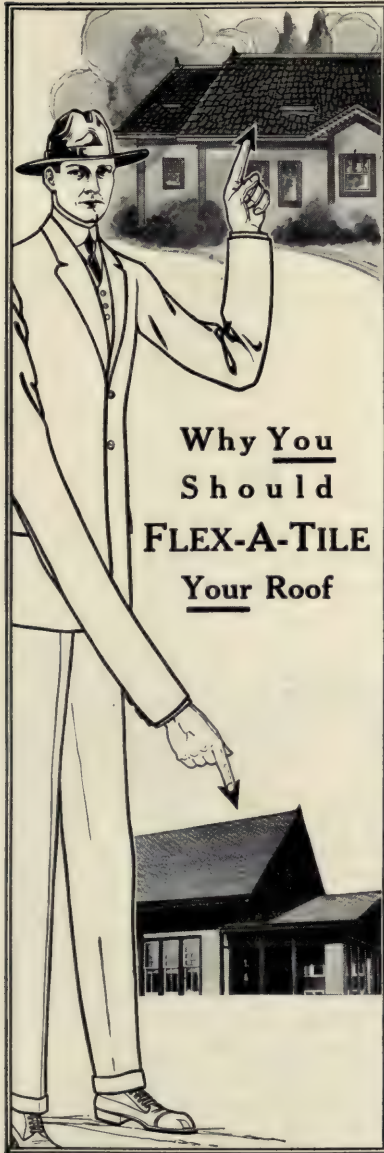
When green is the prevalent color of your china you can redeem it from insignificance by using some pieces of that charming Italian faience, whose inspiration is the curled and folded leaves of lettuce. In self color it is enchanting, but when it is combined with vivid red, in an effort to realize a tomato mayonnaise, it is atrocious.

For green of another tone the plain Japanese ware in cool light green, the tone known as celadon, is good. People who fancy the deep emerald tones can find them in the same ware. This glazed Japanese pottery is commonplace in form, interesting only in color, but there is another sort with a dull surface, known as Midori pottery, whose shapes are very good and unusual, particularly the low, flat teapots, sugarbowls and pitchers, and whose general effect is not unlike that of some of our decorative potteries.

More elegant than any of these are the exquisite pieces of the Coalport potteries, delicate white porcelain with edging bands of vivid apple green, with a very little ornament in dull gold. Cups and saucers of this ware are shown in smart New York shops with tea services of the Midori pottery, with which they harmonize admirably.

The Use of Patterned Fabrics.

An interesting treatment for a room is the use of two fabrics, both patterned, for furniture coverings, one in a small pattern and two tones of color, the other something very decorative, with a large pattern and introducing a good many colors, although harmonizing with the other material. For instance, in a living room, or library, with soft green walls, a davenport and a single large armchair, both over-stuffed, may be covered with a printed linen or cretonne, or a tapestry, in a verdure pattern of many shades of green with a touch here and there of dull rose or blue, while the other pieces of furniture, with their frames in evidence, will be upholstered in some fabrics of two tones of green in a



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DECORATION AND FURNISHING—Continued

tiny pattern. Or these pieces could be covered in dull green mohair damask.

If one fancies a plain material as a foil to the patterned one, one avoids monotony by the choice of something with a pile, like corduroy or velour, but with this the patterned material had better be tapestry, or some material having at least the suggestion of wool or silk.

The Function of Pictures.

Pictures are a wonderful help to the plain wall, and the wall helps them as well, although they look better of course against a wall which makes the suggestion of texture. The picture dealer lines the walls of the inner room in which he displays his choicest treasures with a two-toned damask, or else with a fabric with a pile, velvet or velour.

Large, but not too large, pictures break plain wall spaces better than a good many small ones, and they should have a decorative quality. The large photographs of architectural subjects, plainly framed

in dark mouldings are invaluable in a brown room, as are the carbontypes of famous portraits, while mezzotints or color reproductions, framed in gold, are charming against a green background.

Our Own Colonial.

Our Colonial furniture, as far as it is to be distinguished from the English furniture of the same period, is characterized by greater simplicity, by the preference for curved rather than straight outlines, and by its large expanses of polished surface. Sofas with spreading arms and claw feet and backs elaborately curved are Colonial. So are pillared and claw footed tables, and little sewing tables with lids, which raise to discover trays of many small compartments, and hanging bags of fluted silk. Bureaus, desks and sideboards often have pillars continued down the corners ending in claw feet, and have curving fronts, reminiscent of the French styles of the seventeenth century. Pomegranates and pineapples were common decorative motives, being used for the ends of bed posts and as parts of table legs. Some decorative motives were distinctly patriotic, like the eagle's feathers and stars found on the frames of mirrors. The banjo clock is native, so are several varieties of spindle backed chairs, notably the effective Windsor chairs, with wooden seats and curving banistered backs. Secretaries, combining the functions of a desk and a bookcase, were made in large numbers by American cabinet makers, and though usually every simple, depending for their beauty upon the fine grain of the wood and the brilliant polish of their brasses, are still very desirable possessions.

In the early part of the last century American furniture fell on evil days. A veneer on soft wood took the place of solid mahogany, the graceful curves became swollen and bulky, distinction was sacrificed to an effect of massiveness, and the rubbed finish gave place to varnish, the thicker the better. It was but a step to the rosewood and black walnut horrors of the middle of the century.



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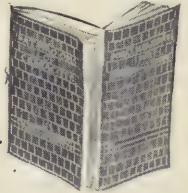
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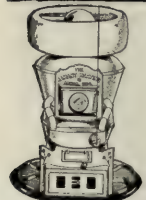
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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Decorating New Home.

L. W.—I am enclosing very rough sketches of the floor plans of our new home with the request for decorating and furnishing the rooms.

The house faces the north and to the south the lot runs back to the Tamarack river. Along the north and east is a glazed-in porch. Down stairs the woodwork and floors are of quarter sawed oak; the wood work stained dull dark golden. All walls are of rough plaster and have been left white. Can you suggest colors for these walls? In the vestibule the tiling which extends half way up the walls is of white.

For the library we shall use our mahogany furniture and I am at a loss to know what color to use for rugs and wall. The fireplace matches other wood work. For summer use I wish a window seat built over the low radiator. Should this be leather cushioned? How should this room be curtained? Ought curtains and shades to be hung inside casing close to glass or outside so as to half cover casings?

Will you suggest curtaining for the living room as well. These windows are of plate glass with the upper panel cut. Unlike other inside doors which are of one panel, the door into the vestibule has several long panels and at the top a narrow horizontal panel of glass. Ought I use a curtain for this? So far I have planned no furniture for this room excepting a large flat top desk in the northeast corner.

Ans.—Inasmuch as the house faces north and the wood finish is already decided we think a soft tone of ecru would be best for the living room wall with very pale tone of the same for ceiling. As this room is well lighted on the east, we think it would bear complementary tones of

lichen green, a soft radium shade, for rugs and upholstery. This would enable us to open harmoniously into the dining room, which with its large flower window, would be extremely attractive in mingled blues and greens. Burlaps between the wood strips would be rather ordinary. There is a heavy paper, almost like pebbled leather which would protect the wall, give the color effect needed and cost much less. In this room we should use a decorative paper above the wainscot and a rug having a plain center with border in blended blues and greens. Plain rugs are now considered much more desirable than figured but are slightly more expensive.

The library we would treat in the new mulberry shades for rug and furniture covering with a wall tinted a soft warm grey. It is quite a problem to reconcile the mahogany furniture with the golden oak woodwork and we think the mulberry would be the best medium as browns are not at all good with mahogany. The seat on radiator should be cushioned in the mulberry—by no means leather.

As the vestibule opens directly into the living room, a warm rich brown should be used on the wall above the tile wainscot. It is rather unusual to use white tile in a vestibule. A small rug like large rug, should be laid between vestibule and stair and the stair should be carpeted to match. We should use fumed oak furniture in both living and dining rooms.

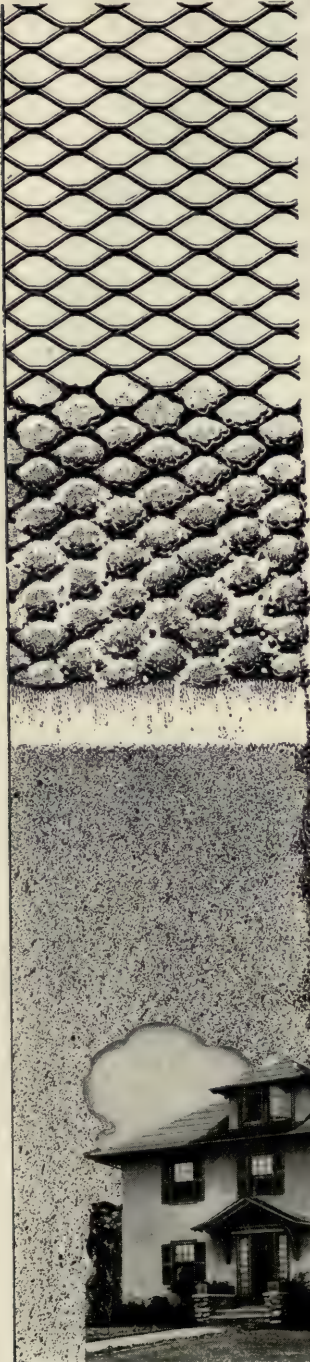
Your upper floor will be difficult on account of the natural finish given to woodwork which is hard to harmonize with furniture. Mahogany or white furniture is out of the question, with such a finish. We think your suggestion of yellow tones for northwest room good, but let it be a dull, light yellow on the wall with browns

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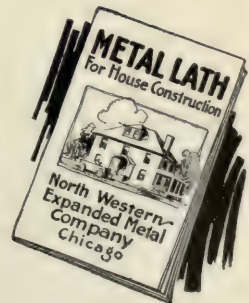
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ANSWERS TO QUESTIONS—Continued

and yellows in the rug. The brass bed is all right but the furniture must be oak. Maple furniture, bed and all, should be used in the little girl's room, with a rose tint on wall up to tops of doors, and rose rugs on floor. Curtains of printed white scrim with rose border. Your own room should have a dull Delft blue tint on wall up to tops of doors, leaving the remaining wall space and the ceiling in the natural oyster white of the plaster. All the bedrooms can have the ceilings left in this way. The furniture in your room should be Circassian walnut, though you can use a brass bed if you prefer.

Shades should all be placed inside the casings, but curtains are a matter of choice. If the glass over vestibule door is plain, it should have a veiling like curtains. In regard to use of table in dining room, we should not like an ordinary table, but a serving table could take the place of a regular buffet, provided you have a sideboard or china closet. The serving table would not interfere with the chair rail.

A Florida Interior.

In the den with old mahogany pieces, we would make woodwork ivory white, using on the walls, one of the imitation grass cloth papers in a greenish gray, with cretonne hangings and valance at windows showing pattern of rose-red hydrangeas in big bunches with the green leaves. We would have one or two chair seats of the cretonne to match and the sofa, if there is one. We would stain the floor dark green and wax it, with a Scotch rug having gray center and striped green border.

We should advise white woodwork for both of the upstairs bedrooms. There are delightful English chintzes to use with mahogany furniture, both in papers and fabrics. If furniture is to be purchased, we would suggest the pale gray enamel, with blue chambray wall outlined with narrow band in blue and rose on white ground, white ceiling. Rug of blue and white with pink in border.

About Wall Decoration.

H. A. B.—I enclose floor plans of a bungalow I am building. Will you kindly suggest interior finish?

All the floors are maple. The walls have a hard finish plaster on them.

Would it look well to stain the woodwork a dark green; to paint with light green mellotone the living room and dining room walls, stenciling them with a dark green, and to paint with mellotone the chamber walls a light blue and pink respectively, stenciling them also? If so, will you kindly tell me what to use in the den and bathroom?

Ans.—We do not think your house should be less beautiful than your cousin's, merely because it is a cottage. We think your idea of treatment altogether feasible, though we should prefer a little different wall color than "robin's egg blue" for living and dining rooms. We understand that you desire to use mellotone on these walls. It is necessary to change the standard colors of any ready made tint to obtain such a shade. We should use light grey mellowtint and add to it about 20 per cent of delft blue. We think this will give you a good wall tint on the lines you desire, but you best experiment with it first.

The conventional stencil border in living room could be in dull sage greens and dull rose. It should not be wide. We should make the wall below plate rail a darker shade than above but carry the upper wall to the ceiling and put your grape frieze there in green leaves and dark blue grapes. Ivory ceilings will be good in both rooms, mahogany woodwork and furniture. The living room furniture should be upholstered in deep rich blue with touches of old rose in pillows, etc. There should be side draperies at windows of a lighter shade of dull blue. We should prefer white woodwork with dark mahogany doors in the chambers, all white in bath. Light grey wall for front room with rose chintz draperies, rose stencil and mahogany furniture. Blue tint for small west room and buff for north room. Do not use the Dutch stencil at all.

Changing the Living Room.

A. C.—Please tell me colors for rug to suit room with walls of green burlap like sample, ceiling old ivory.

Southeast room 15x16, 10 ft. ceiling. Ground 3 windows south, 10 ft. window



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- ❑ OWNERS and BUILDERS find it a clinching argument to say "It's Floored with OAK FLOORING." It means that the tenant or buyer will be glad to pay 10 to 15 per cent more. In color, it is rich and cheerful, and imparts an air of refinement and elegance to a home. It is the modern flooring.
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For windows 1 yard wide by 2 yards long, 75c (except in the Far West.) Special sizes and Brenlin Duplex—white one side, dark the other—made to order at proportionate prices.

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This book shows actual samples of Brenlin Unfilled Shades in a colors, and gives many helpful suggestions for the proper treatment of your windows. With it we will send you the name of the Brenlin dealer in your town. If no dealer in your town can supply Brenlin, we will tell you how to order direct. We satisfactorily fill hundreds of mail orders every year. Write today. CHAS. W. BRENNAN & Co., 2098 Reading Road, Cincinnati, Ohio.

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Genuine Brenlin Unfilled Shades have this mark **BRENLIN** perforated along the edge. Look closely for it when you buy and when your shades are hung.

For temporary uses and for windows of little importance, there are two cheaper grades of Brenlin—Brenlin Filled and Brenlin Machine Made, at 55c and 30c respectively (except in the Far West,) for windows 1 yd. wide by 2 yds. long.

ANSWERS TO QUESTIONS—Continued

box outside, 10 ft. opening. One east window, fire place and mantel, hearth and facing brown oak trimmed, waxed, light browns by age. Furniture, mahogany and dark green and black leather chairs and settee. There is an upright piano and small mahogany table. Called a living room, but we don't live in it, for it seems somber. Floor pine, but finished about same color as oak trim. Want a large rug, 10'6"x13'6". A Royal Wilton now on floor. Small figure and dark center the chief color effect. Want this rug to use in bed room.

The real living room 14x19 opening by 7 ft. side doors into this room. Has light brown burlap walls, Craftsman library furnishings, brown leather, 14 ft. east bay, a mantel and grate. Small figure Wilton rug, browns predominating color. You may please suggest color of rug in anything from Whittall Anglo Persian down to any good grade Wilton. Will retint the walls if necessary to harmonize with other room. The wall covering is new and all in good condition. The house is an old type of 25 years ago, built for client who wanted all the windows the architect could put in. Splendidly built and good for a hundred years, but not such a home as we would build and want to keep. The anatomy of rear portion has been changed completely in my 5 years' ownership. Dining room enlarged and made new, kitchen remodeled, new pantry and back porch. An old house is a fine graveyard for greenbacks and I have now spent price of a comfortable cottage on improvements and still at it.

Ans.—We sympathize with you in your preference for the cheerful warmth of your "real living room" and grieve

with and for you as to the green burlap horror of the front room. No wonder you don't live in it. We are interested in problems like these and think we see a way to so reform this room as to make it a delight, instead of a fright, but will you do it? Judging from your letter we think you will.

There are two things to build from that are good; the old ivory ceiling and the soft time-toned woodwork. Now from the cosy living room in warm browns, let us open into a drawing room, not a formal room for state occasions, but simply a room to receive the guests one cannot always admit to the family life of the sitting room. First, you must wash over the dreadful dark green burlap with a sort of ashes of roses color, between a brownish grey and an old rose. Will you? Then under the picture molding we will run a 3 inch border of Tudor roses and dull green leaves. Second, the dark green and black leather furniture coverings must go and in their place, tapestry in the greyish brown of the woodwork, old rose and soft dull greens. One chair in plain dull rose velvet and a couple of wicker or rattan chairs stained the soft brown and upholstered, one in the tapestry and one in the plain dull rose.

Then the rug must be, not a Whittall figured, but a Saxony or a Shawmutt with center of the plain dull rose and border in three shades of the same color. Such a rug costs no more than the Whittall and is infinitely more artistic. Then this room wants a dull glass jardiniere bowl on the small table placed in the bay window, with a great spreading Boston fern. It wants a wicker reading lamp and spreading wicker shade lined with rose—and other things.



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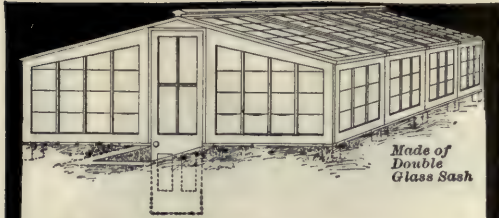
consisting of *Electric Washing Machines; Ironing Machines; Ironing Boards; etc.*, especially adapted for use in the laundry room of *Residences, Apartment Buildings* and moderate sized *Hotels, Hospitals, Sanitariums* and similar Institutions. Can furnish individual machines or complete outfits. Our appliances are the best that can be had—there are none better.

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This greenhouse is 11 x 12 ft. in size and made of Sunlight Double Glass Sash. 8 Standard Sash (3 x 6 ft.) form the roof. The sides are made of 4 Sunlight Double Glass "Pony" Sash (3 x 3 ft.)

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Productive capacity over 50,000 barrels per day—largest in the world.





Adding to the Family Income.



IN these days of the higher cost of living, too generally accompanied by no increase of income, the only solution of the economic problem seems to be for the housewife to add to the family resources in some way. It is needless to say that in the majority of cases this can only be done at home, and in some way which will not interfere with the efficient care of husband and children, and for most women the most practicable things are those along the lines of such proficiency as they may have attained in some department of housekeeping.

The thing that occurs to most women, when confronted with such a condition, is the time-honored industry of taking boarders. Undoubtedly there is a demand for this sort of thing, although less and less, as years go on, do the sort of people whom one would wish to admit to one's family seek board and lodging, preferring the semblance of a home afforded by living in rooms and going out for at least the principal meal of the day. But the keeping of boarders has such a deteriorating effect upon the family which essays it that it should be thought of only as a last resort. Moreover, unless undertaken on a large scale, and by a woman with special ability for purchasing at good advantage, the profits are disproportionately small to the efforts expended. Besides the taking of boarders is in a small community almost certain to involve one in social complications. People who, undeterred by these considerations, contemplate relieving their embarrassments by the reception of the "paying

guest" should bear in mind that the more impersonal an enterprise of this sort is the more likely it is to be permanently successful, and that in its last analysis it is better adapted to the childless wife or widow than to the mother of many or few.

Almost any community contains some woman who has made a success of the manufacture and sale of some article of food, and the more successful she has been the more certainly has she avoided the middleman and marketed her product directly. The women who have earned more than pin money through the Women's Exchanges are few and far between, and are likely to be until the Exchanges are run on more business-like principles than most of them are at present.

One of the most profitable industries of this sort has been the making of preserves. These lines are written in a New England city in which lives a woman who once was a competent corporation boarding house keeper. She made jelly of three sorts—apple, grape and currant—as a side issue. Now she devotes her time to the business, supplying nearly every grocer in town, and adding constantly to kinds of jelly made. Her product is not in any way remarkable and is sold at a very moderate price, she herself receiving ten cents a glass, of which at least one-half must be profit, but she is making money "hand over fist." Doubtless her success could be duplicated by almost any woman who would make a determined effort to place her wares.

Pickles are another profitable industry, and much money has been made by the



This \$5,000 house equipped with the TUEC

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Because the owners of the finest residences and business buildings have been unanimous in choosing the TUEC Stationary Vacuum Cleaner for their buildings some people of moderate means have assumed that the TUEC is exclusively a "big building" and "big priced" system. That is not the case. The

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is well within the means of any family that can afford a stationary heating system in the basement, stationary plumbing and electric lights. Out of the fifteen sizes of TUEC Machines there is one that is perfectly adapted to the requirements of your home. It can be installed at reasonable price. Maintenance and operation will cost you practically nothing.

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renders a service each year worth many times its cost. Saves fuel—not a little, but a lot and surely ends the former round of continual attention. The "MINNEAPOLIS" has been "The Standard for over 30 years."

MADE IN TWO STYLES

Model No. 60 with square clock Model No. 47 with round clock

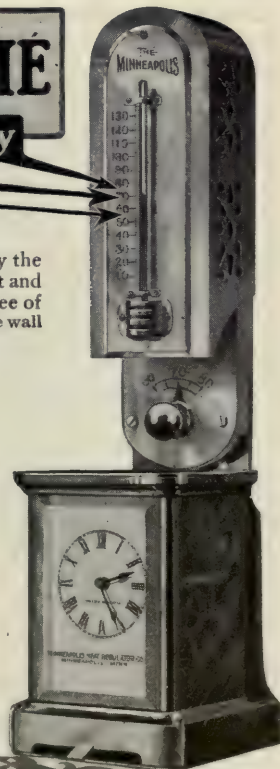
The clock feature enables one to secure automatically and silently a change of temperature at any set time. Model No. 60 (shown here) gives an eight-day service of both time and alarm.

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manufacture and sale of certain sorts of sauces. Plum pudding need not be in any way remarkable to compete successfully with the manufactured article commonly sold, and women who make mince pie meat may count on trebling their original investment.

Women who have been successful all have the same story to tell. What they have sold was of good quality, they were careful to maintain an unvarying standard, they bought at wholesale whenever possible and they disposed of their goods directly to the customer. Different communities demand different sorts of things, but the underlying principles of success are the same.

One circumstance which is in the favor of the woman who wishes to sell pickles, preserves, or the like, is the difficulty with servants which is common to every part of the country. Almost every housewife is on the lookout for ways in which she can lessen the work required in keeping her family comfortable, and is prepared to purchase a great many articles of food, which she formerly thought must be prepared at home. In many instances the prices asked by the Exchanges are prohibitive, but there is certainly a wide field for the competent woman who will sell prepared food of various sorts at a reasonable profit and directly to the consumer.

A Preserving Point.

Many people have experienced difficulty in keeping canned fruit, done up with half a pound or less of sugar to a pound of fruit. This difficulty can be obviated by preserving the fruit pound for pound, with a heavy syrup and adding enough water at the time of using to thin out the syrup, cooking it for a few minutes.

The process may be reversed with fruit which has not had enough sugar to make it palatable, as is the case with much of the canned fruit sold. The fruit can be cooked slowly with added sugar until the juice is thick and syrupy. Peaches and pears are specially responsive to this treatment.

The Hackneyed Prune.

In view of the prices charged for prunes for the last few years, it is diffi-

cult to think of them as the mainstay of cheap boarding houses, but they are beginning to be cheap again. You have no idea how good prunes can be until you have cooked them without using any sugar at all. Wash them carefully and soak them over night. In the morning put them in a casserole, or a deep earthen dish, cover them closely and set them either on the simmering burner of a gas range or in a slow coal oven, and let them cook several hours, or until the water, of which there should be a good deal, is entirely absorbed. Served with some sort of coarse bread, they make a delicious luncheon.

Strawberry Conserves.

Such great uncertainty attends the making of strawberry preserves that few people undertake them. A conserve of strawberries cooked down till very thick, with an equal weight of sugar is, however, attended with no risk of spoiling. If lemon juice is added to the strawberries the liquid will jelly. This conserve is nice for flavoring pudding sauces, for filling tartlets, or for the inside of an iced layer cake, while bits of it are very decorative on a floating island. Sometimes one has a chance to buy a job lot of strawberries late in the day. If they are hulled immediately, weighed and covered with their proper proportion of sugar they make a splendid conserve.

Keeping Up One's Interest.

The writer knows an old lady, who at eighty-one is still young, despite the fact that she has had a life filled with all sorts of trouble except material ones. And she accounts for this perennial youth by saying: "You know I've always been so interested." Does it not give a clue to a good many of our difficulties? So often we are not interested. Indeed we rather cultivate a bored attitude, thinking it superior. Never was such a mistake. Every department of the household life, to put the matter on its lowest plane, feels the influence of such an attitude. Servants have no motive for doing their best because they can expect no expression of appreciation. All the spontaneity of childhood is checked and its enthusiasm chilled by being met with persistent indifference.

A Clean Kitchen

adds zest to one's meals. To know that the dishes were prepared under absolutely sanitary conditions makes them more appetizing. The first step toward establishing such conditions is to cover the kitchen floor with

WILD'S PARQUET INLAID LINOLEUM

"WILD'S for WEAR"

It is perfectly sanitary and, being impervious to water and grease, does not readily stain. It looks just like hardwood thus adding a touch of dignity to the kitchen; is easily cleaned with soap and water; and the patterns wear for years as they are inlaid (colors through to the back). This superior type of linoleum is less expensive than wood parquetry and never needs "doing over." It is noiseless, very easy on the feet and extremely durable. Any girl would take pride in keeping such a floor spick and span.



Remember, "**WILD'S for WEAR.**" Only the best linseed oil, cork, etc., are used, which combined with the extreme compactness and liberal thickness of Wild's Parquet Inlaid Linoleum give it such remarkable durability.

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When not in use, the hopper lies in the bottom of the chute body. The door locks automatically either open or closed. Strictly burglar-proof. With 1/4 inch wire glass or steel panel in door.

Write for circular and address of nearest dealer.

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Looking at the household in the abstract, not as our particular job, of which we are rather tired, does it not show a poor sense of proportion to belittle the work which is so much more important and far reaching than let us say the selling of dry goods or the management of a street railway? The fact is that we women do not realize the dignity of our calling. If we did we should be so interested in planning for the welfare of our households that we should be waking up in the night to think of ways in which we could improve this or that department of them. We are too apt to think that because a woman is out in the business world her life must be wider and fuller than our own, that she must be in close touch with all sorts of large enterprises. There are of course exceptions, but in most cases the woman in an office has only the most accidental connection with the world of affairs. She is a very small cog indeed and the last thing most employers desire is the display of any sort

of interest by their women clerks or secretaries. While we in our kitchens, whether doing the work or superintending it, are the whole thing. And may not preserves be a great deal more interesting than pig iron and the adjustment of a balanced ration quite as thrilling as the constant repetition of some chemical formula in the manufacture of starch or shoe dressing?

The Remedy for Fatigue.

One aspect of taking an interest in our work is that it obviates so much physical fatigue. The task you enjoy is never tiresome. And you can learn to enjoy the common routine if you set yourself to do so. Once you set yourself to the improvement of your methods and the increase of your efficiency, you are sure to take pleasure in what you are doing. Perhaps you may not enjoy the many merely mechanical parts of housekeeping, but you can train yourself to do them with your mind on something else.

A LETTER FROM KOREA

The sale of Hess Steel Furnaces, direct from factory to consumer, is not limited to neighborhoods near the home office nor even to the United States. We sell frequently to customers in Canada, and here is a letter just received from a customer still farther distant, to whom we sent a complete furnace outfit, with blue print and instructions for installing. He is not a mechanic, and in far Korea mechanics are not available, yet he had no difficulty in installing the heater and getting the results we guaranteed.

HESS WARMING & VENTILATING CO., Chicago, Ills.

TAIKU, Korea, May 23, 1913.

DEAR SIR: In reply to your recent communication I take pleasure in saying that the heater has proved entirely satisfactory as a heater and met the purpose for which it was secured. I have regretted since that I did not at the time secure the next larger size and arrange to heat the whole house, but the size secured was only intended to heat the lower floor. I may say that the heater has given satisfactory service with the poor variety of fuel available here while two other furnaces (of a widely advertised variety) in the same Station here have proved a total loss.

Without any previous experience in such work I set the heater up myself, there being no one here who ever saw such an apparatus before, and no native iron worker of course, who could be trusted to do the work properly.

Doubtless Mr. Renich of An Dong, in this province, informed you at the time of purchasing his heater that it was through seeing and knowing of the satisfactory results of operating mine that he decided to purchase a Hess heater.

Let me say again that I appreciate very much the generous terms which were given me at the time of purchase.

Yours very truly, (signed) WALTER C. ERDMAN.

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HESS WARMING & VENTILATING COMPANY, 1217 Tacoma Building, CHICAGO, ILL.



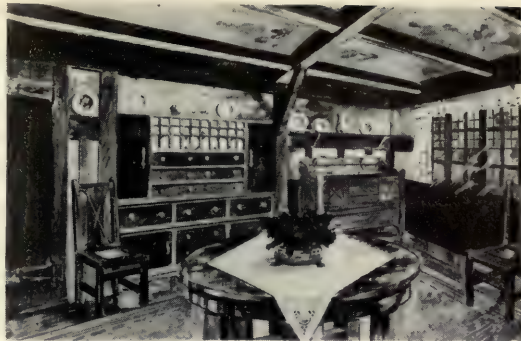
You can have a fireplace that throws the heat out into the room and the smoke up the chimney.

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with their patented Head, Throat and Damper insure correct construction in the throat, the most vital part of the fireplace. This device makes it possible to regulate the draft to suit weather conditions.

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This wonderful liquid with one application produces that desired antique effect so beautiful in home interiors.

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Anyone can apply "Lacklustre" with a brush or cloth. Then wipe it off with a piece of cheesecloth and you find perfectly reproduced all the rich shadows, all the soft tints and colorings of the finer antique woods.

And the finish is permanent as well as beautiful. "Lacklustre" dries quickly, penetrates and preserves the wood and does not hide the grain. It gives the gloss of wax but has none of the objectionable features.

The presence of a small amount of "Liquid Granite" Varnish in this preparation insures the permanency and lasting beauty of the "Lacklustre" finish.

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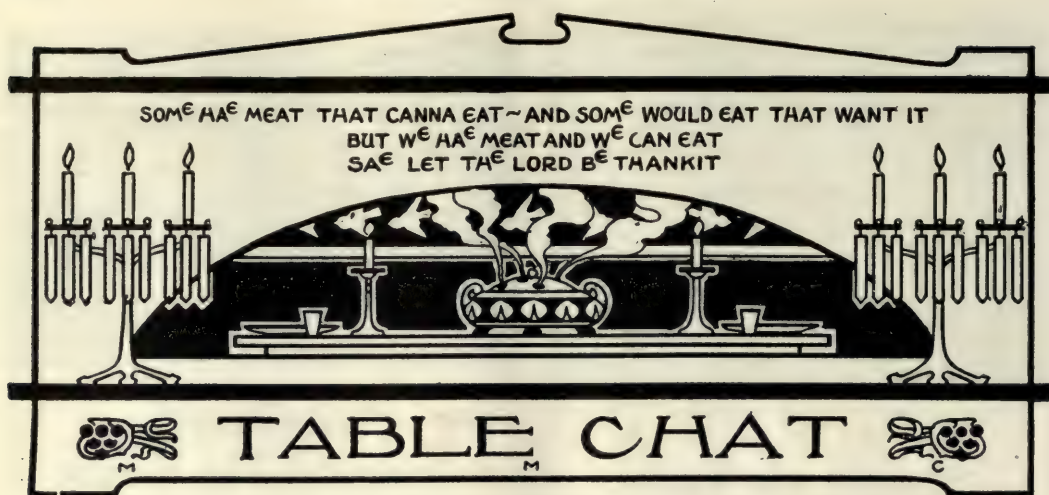
Our designing department is at your disposal to advise and assist in developing a pergola feature for the garden. Upon application we will submit you a sketch of a pergola to suit the space that you might select for it, and with it the cost of furnishing the same ready to set in place. We invite correspondence.

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The Month of Profusion

SEPTEMBER is the most lavish of all the months. The bounties of autumn have arrived and those of summer still linger. No other month has such a wealth of color and such glowing yet tempered sunshine. It is an esthetic pleasure just to look at the piled up stalls in the markets, one vieing with another in the display of vivid tones and effective contrasts of color, and the flowers of the season have the same varied splendor as its fruits.

You can do charming things in the way of table decorations by combining flowers and fruit. Does the combination of pink and green take your fancy, you may set a silver dish in the center of your table, piling it with rosy peaches and pale green grapes, while at the corners are tall vases holding pink dahlias and ferns, or the silvery green and white of euphorbia.

Or for a warmer color scheme you may choose a mass of Bartlett pears, Japanese plums and Delaware or Salem grapes, surrounding it with a ring of nasturtium blossoms and leaves, the blossoms shading from yellow into deep red. And the beauty of September is that with the shortening days comes the need of dining by gas light, and the indefinable sense of cheer and comfort that goes with artificial light.

"Company China."

It is an easy matter to lay down abstract directions for the decoration of the

dinner table, when they are quite likely to have all their good points killed by the china used. So if one is fortunate enough to have two services, it is well to choose the one for great occasions of white and gold, which is always charming, and can be adapted to any color scheme. Next to white and gold, for all-round use, is a service with a decoration in a neutral green, such as the maidenhair design of the Limoges pottery.

The objection to white and gold is its expense, and the medium qualities are very cheap looking indeed, the gold inadequate and of poor color. I have lately seen an English porcelain with an edge and handles of gold, making no pretensions to the thinness of real porcelain, but agreeable in color and surface, which costs about twenty dollars for a full service. It is easy to vary such a service with special dishes and plates for salad and dessert. A white and gold service also makes possible the use of the colored embroideries that are slowly winning their way back to fashion.

Colored Table Embroideries.

Not that the table pieces which introduce color are anything like those in which we rejoiced fifteen or twenty years ago, whose apex of achievement was represented by a realistic copy of American Beauty or La France roses, with thickly padded petals. The new embroideries

GAUMER

"Gaumer Lighting everywhere, follows the evening glow"

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Hand Wrought Lighting Fixtures

Finished in Antique Copper, Bronze, Brass, Old Silver or Dead Black they harmonize with their surroundings.

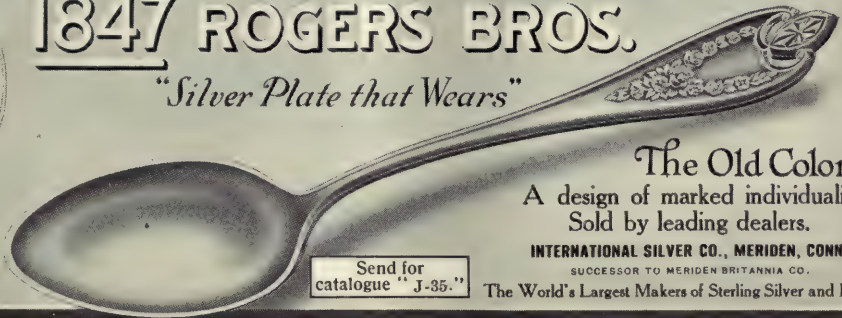
Progressive Dealers display the Guarantee Tag on the genuine indoor Gaumer fixtures—it insures you against the unnecessary expense of refinishing later on.

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1847 ROGERS BROS.

"Silver Plate that Wears"*The Old Colony*

A design of marked individuality.
Sold by leading dealers.

INTERNATIONAL SILVER CO., MERIDEN, CONN.

SUCCESSOR TO MERIDEN BRITANNIA CO.

The World's Largest Makers of Sterling Silver and Plate.

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**A "NEW WAY" HOME**

Designed with space saving sanitary Wardrobe instead of dusty lost space closets.

Build Your Home the "New Way"

10% larger Bedrooms—50% larger wardrobe capacity and you can save from \$100 to \$300 in building a Home with "NEW WAY" Wardrobes built in flush instead of the old-fashioned, cob-webby, dusty closets.

A home planned and built with these new space saving, sanitary and convenient wardrobes will be more comfortable to live in and much easier to rent or sell than if built with the old-fashioned dusty closets. Send 50c now before you forget it for our "NEW WAY" Home Plan Book, which shows 22 designs for homes, ranging in price from \$1200. to \$12000. all of which are planned with these "NEW WAY" wardrobes.

JOHN THOMAS BATTS

Room 612 Architectural Dept., Grand Rapids, Mich.



Wardrobe in an Alcove Dressing Room—Garments extended.

TABLE CHAT—Continued

are largely white, the color appearing as an outline, a series of dots, or as a few stitches introduced to give an effect of shading at the tip or center of a petal. In almost all the work one sees, the color used is either old blue or a gray green and the thread chosen is cotton, not silk. Occasionally one sees an effective piece done in a sketchy sort of darning on heavy linen, but it takes more artistic skill than the average worker possesses to manage the direction of the stitches.

to turning corners and going around curves as Cluny, although it is quite as durable.

In Peach Time.

Peaches usually last well through September, the very best ones often coming after really cool weather has set in. Like strawberries they are as good cooked as raw, but have an entirely different flavor. As a rule peaches can be substituted in almost any apple receipt with good results, with the possible exception of jelly,



A COMPANY DESSERT OF PEACHES.

Without a trained eye for form and line darning, which looks very simple indeed, is apt to be grotesque at its worst and stiff at its best.

The Economy of Lace.

Beautiful as some of the embroidered table pieces are, the writer sees no reason to change the opinion she has often expressed in these pages that for beauty and durability, and consequent economy, nothing is comparable to Cluny lace in a close design with few open spaces. Some of the patterns are standard, so that a piece lost or injured can be easily replaced. Almost as durable, if not so handsome is plain surfaced table damask with an edging of Cluny. Filet also looks well but does not lend itself so well

which is seldom successful. A deep peach pie, with the crust broken in, served warm with cream is a delectable dish. So is a peach shortcake, made with puff paste. Peach tapioca substitutes large whole peaches for apples, the stones taken out with a knife without splitting the peach.

Our illustration shows a company dessert made from peaches. The peaches should be very ripe and are mashed through a colander, or put through a vegetable press. To a cup of pulp add sugar and a teaspoonful of brandy. Dissolve an eighth of a box of granulated gelatine in a cupful of boiling peach juice, having previously soaked the gelatine in a little cold water. Stir in the peach pulp, beating it smooth, and pour into individual moulds.



THE KEWANEE SYSTEM OF WATER SUPPLY



IF IT HASN'T THIS TRADE MARK—IT ISN'T A KEWANEE—

Private Water Supply Plants That Equal the Best City Service

You can get good service from almost any system—for a few months after it's put in. But getting that service steadily, surely and regularly—not for months but for years—is another thing. And it depends entirely on the kind of machinery you get.

The whole line of Kewanee Pumping Machinery has been designed under peculiar conditions. Our original specialty was the pneumatic tank, as opposed to the elevated tank, and we had no intention of manufacturing pumping machinery. We experimented with practically every line of pumps on the market and adopted and sold the best we could find.

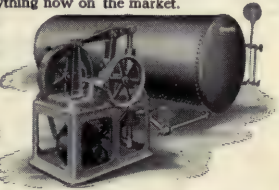
Being responsible for the satisfactory working of every Kewanee System, we received all complaints in regard to defects in pumping machinery and difficulties encountered in installing and operating it. As far as possible, we had manufacturers change designs and material to correct the faults in their pumps and we began making our own pumping machinery only when we found that old designs, old shop machinery,

and old methods prevented us from getting as good pumping machinery for our customers as we knew they were entitled to.

We candidly believe that when we started to make our own line of pumping machinery, we had a better knowledge of the strong and weak points of what the market afforded in this line and also of the difficulties in installing and operating which were encountered by all kinds of men in all kinds of places, than anyone else ever had.

We were not tied down by any old ideas, old designs or old shop equipment. We were not forced to hurry for we had an established business with customers who would take whatever machinery we could furnish with our complete Kewanee Systems. The market was already made for whatever we would manufacture and brand with the Kewanee name, but we laid down this rule and have followed it consistently through the development of the whole line of Kewanee Pumping Machinery and the special devices which go with it. "We will not manufacture anything unless we are sure that it is a distinct improvement on anything now on the market."

Ask your plumber about the Kewanee System. He will furnish and install it. Our engineering department is at your service for free consultation, specifications and estimates; ask for 64-page catalog "D."



Kewanee Water Supply Company

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One of the Complete Kewanee Systems



*Stained with Cabot's Shingle Stains.
Muhlenberg Bros., Architects, Reading, Pa.*

50% cheaper than Paint

50% cheaper to apply

100% handsomer than Paint

This is only a part of what you gain by using Cabot's Shingle Stains

They are made of creosote, and thoroughly preserve the wood. Your own men can put them on, or you can do it yourself, if you are back where there are no painters. They give soft, transparent coloring effects, that harmonize perfectly with nature. They are used on all exterior woodwork, shingles, siding, clapboards, or boarding. The original Creosote, genuine wood-preserving Stains.

You can get Cabot's Stains all over the country. Send for free samples on wood and name of nearest agent

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WALL AND CEILING HINTS from experienced users.

No. 8. Recommends it for Three Reasons

"In order to give a dignified appearance to the interior, Beaver Board has been employed to finish the ceilings and wainscoting of the assembly hall and class rooms of the Norfolk Academy, Norfolk, Virginia.

"It is with pleasure that we recommend to the public the use of Beaver Board from the point of view of sanitation, durability and artistic effectiveness."

FRANCIS BACON, Headmaster,
Norfolk Academy, Norfolk, Va.

BEAVER BOARD

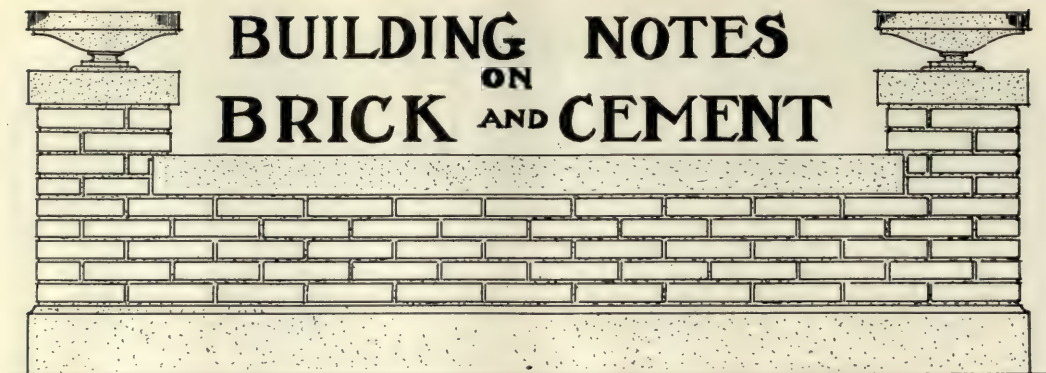
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Read letter above from the Headmaster of this School



Cement Stucco.

AS to methods in doing stucco work, I am always more interested in reading about it than in giving information, but here is my method and I have not had a poor job yet. This is my way on an old building for two coat work: First, see that everything is well nailed up tight, then cover the entire building with single ply tar paper. Take steel furring strips and nail 12-inch o. c. and drive staples every 6 inches up and down (take whatever size the job calls for, usually $\frac{1}{4}$ -inch); then run the expanded metal lath around the job and also fasten with staples right over the furring. This must also be well nailed, also any sags that may form in between the furring. The work is then ready for the first coat of plaster. I use this quite coarse. I put my sand through a $\frac{1}{4}$ -inch screen run flat, and take this sand and mix 3 to 1 with not more than 10 per cent of hydrated lime. (I very seldom bother about hair). I want the first coat pushed clear through the lath and tight up to the tar paper and enough more to cover all the lath, then it should be scratched well—real rough. I like to have this well set up before I put on the next coat, writes Lewis T. Howe, North Weymouth, Mass., in *Concrete-Cement Age*.

For the second coat I use an $\frac{1}{8}$ -inch screen plated on an incline of about 45° and screen my sand through this and mix this 2 to 1 with 5 per cent hydrated lime added, and before plastering this on, I have my first coat well sprayed with water and kept well soaked, ahead of the men. This coat is generally finished with a wood float and if proper care is used in

putting it on, there is not much danger that it will crack. As many more coats can be put on as desired, but for a cheap job, these two coats will give good satisfaction. The work looks fine after floating and right here is where most people's trouble starts. Most men call the job finished, but it isn't. If the weather is hot or dry, or hot winds are blowing, it should be taken care of. Just as soon as it is safe to do so, I wet it with a very fine spray and keep it damp for several days, and if possible, hang canvas up to keep the sun away from it and a little extra care in this way pays well. As to the lime, I find it is an advantage to soak it at least 24 hours before using, as it gives better results. It is not much trouble to find out when you have the right proportion of putty, which I stir in the water that I wet the cement and sand with, and I also want all this mortar well mixed.

Some people think that there is nothing to it—just to put stucco on a building, but I find it is necessary to put quite a few brains in the mixture if a good job is wanted. I find that many masons want to be too free with the lime, and in some jobs it looks as though the hair were thrown in free, as in places it sticks out like hair on a dog.

I remember one residence in particular, where there were a great many horizontal cracks in the stucco running almost the entire length of one side of the building. These cracks were about 2 ft. apart and were very pronounced. The whole area of sides and ends was very unsightly. After a very careful investigation it was found that in nearly every instance where cracks had developed that they were at a point where the wire lath was

Your Roof—How to Choose It

The selection of a roofing for your home is far too important to leave to the judgment of others.

First, durability and service should be considered. Second, the question of economy is important. Third, the appearance should not be forgotten, for upon it depends the sightliness of your residence.

Wood shingle roofings—tin, slate, metal roofings—other common, ordinary roofings answer the purpose for which they are intended:—

to cover the rafters and afford protection, but there the efficiency ends.

—They are not entirely fire-proof, water-proof, or proof against the elements.

—They are not economical—for not long after these roofings are laid, they require re-painting, need repairs, other troubles arise.

—They are not attractive—they lack beauty—they detract from the appearance of any dwelling.

The ideal roofing—a roofing that has every feature that counts for efficiency and economy—a roofing that will give beautiful architectural effects—while the cost is less—is a roofing of

Sal-Mo Shingles

In Durable Colors From the Natural Rock—Red Granite, Green Slate, Garnet Brown, Red Slate

The various colors that predominate in the color scheme of Nature are made use of in Sal-Mo Shingles, permitting their adaption to the color of your house, the grounds—trees, shrubbery, foliage, etc.

These colors are not painted on the roof. They do not wear off or fade off. The colors are a part of the roof—the material of which the roofing is made.

The durability of the materials—Natural Rock and a Bitumen Mastic—used in the manufacture of Sal-Mo Shingles—combine to make a product superior to anything of its kind on the market.

—It is this material which makes a Sal-Mo Shingle roof so fire-proof that burning embers can be thrown upon it and harmlessly die out—neither setting fire to the roof nor to the sheathing underneath.

—It is this material which makes a roof proof against wind and all kinds of weather—against rain, snow, ice.

—It is this material which keeps the house warm in winter, cool in summer.

—It is this material which, being so flexible, enables

you to secure beautiful architectural effects—roll edges, thatch effects, rounded corners, etc.

Our Guarantee of 12 Years Backs All Our Claims

On top of all this, the cost of laying a Sal-Mo Shingle Roof is the lowest of any good roofing. It never requires paint or repairs—will not crack as does other material—cannot decay or rot.

Our Free Book—"The Roof Beautiful"—

containing pictures of many homes showing different color Sal-Mo Shingles in use will be sent upon postal request. This book will give you a good idea of how your home would look should you specify Sal-Mo Shingles, also explain how laid, the cost and the name of dealer nearest you who will gladly furnish you with all information.

Don't decide on any roofing until you learn more about Sal-Mo Shingles and how they will not only beautify your home, adding to its attractiveness, but also increase its real money value. Send for FREE book today—NOW. Address Department B, the city nearest you.

Architects, Builders, Carpenters and Roofers are invited to write us for samples, etc.

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**Chicago
New York
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lapped and in many places less than $\frac{1}{4}$ -inch thickness of stucco was over these laps. In some instances by cutting out the cracks it was found that the metal lath was not even tacked solidly in place, and yet stucco work in general was condemned by a number of parties on the results obtained on this one building. It was quite apparent that the trouble was not due to any fault of the material, but in this particular instance was due entirely to the application of the wire lath and stucco.

In another case regular lime mortar plaster without any Portland cement was used for the scratch coat. The second and finishing coat consisted of a poor mixture of Portland cement and sand. The finish coat was only about $\frac{1}{4}$ -inch thick. Moisture penetrated through the finish coat and the mortar composing the scratch coat being subjected to continued moisture disintegrated and the stucco came off in sheets.

Don't use too much lime. Use plenty of cement. Use coarse sand in first coat. Push well through the lath. Keep work well sprayed with water until hard. Spray well before putting on second coat, also any other coats that may be applied. I don't approve of two-coat work, but on cheap jobs, people will have it. I think it is best to have no less than three coats.

Another very important matter is the measuring. I find many people use the shovel to measure with. This is all guess work, as no two men will measure alike. A bottomless box to hold just the amount of what sand it is expected to use in each batch with a sack of cement is a handy thing. In measuring lime I generally find a pail of about the right size. Now another very important part of stucco work is to have help enough on the job so that when stopping or starting the work, there are no places to show, but always finish to a corner or up to some window or door frame, as it is very hard to make a neat appearing "splice" in between night and morning work.—*Cement and Engineering News.*

Concrete on the Farm.

The one place in the whole world where, more than others, buildings should be made imperishable and indestructible, is on the farm. Within the city limits,

what is new today might be old tomorrow; and we often see eight, ten, and even twelve-story buildings torn down to make way for thirty, forty and fifty-story structures. In the rural districts, on the other hand, once a building is erected, it is passed down with the soil from father to son, often remaining in the same family for century after century; and as farm buildings are always in the open, exposed to all the destructive agencies, wind, rain, snow, frost, decay, flood and fire, he builds wisely who builds for the future with materials as imperishable as the soil. Agricultural lands always increase in value. It is only the buildings which grow old, deteriorate, and drag down the total value of the estate.

—*Building Progress.*

Tinting of Concrete.

"Considerable interest is being shown," says *Contract Record* of London, "in the tinting of concrete when it is used for residential purposes. Undoubtedly the work can be done successfully with certain colors. Concrete can be tinted green, for instance, by the use of chromium oxide, in proportions of approximately 5 to 8 per cent of the weight of the cement used. A yellow or buff tint can be obtained by the use of French ochre in the percentage of 4 to 10, according to the shade desired. Red is obtained by the use of red oxide of iron, that manufactured in Germany or France preferred. A pure white concrete can be made by the use of one part white Portland cement and two parts marble screening, tough, hard marble preferred, the screenings to pass through a No. 8 screen and be collected on a No. 40 screen. It should be mixed fairly wet so that it will run into the molds. The molds should be slightly rocked and jarred, so as to expel the air bubbles. For some characters of work the concrete can be made not quite so wet, but of about the consistency used by brick masons in laying brick, and pressed in the mold. As soon as the concrete is hard, say in three or four days, it should be rubbed well with a fine terrazzo polishing stone. This will give the appearance of a white polished surface. Although the cement itself will not have been polished, each particle of marble will present a polished surface."

No Other Stucco Can Compare With This

You can take far more pride in your house if the exterior is of J-M Asbestos Stucco than if ordinary stucco is used, and you can feel safe that it will give perfect satisfaction. ¶ Not only when the house is new, but as long as it stands. ¶ Unlike all others, J-M Asbestos Stucco is entirely free from sand. There is nothing in it to prevent proper setting—no sand (which contains foreign substances) to cause it to become mottled, stained and discolored.



*Residence of J. S. Stehlin, Long Beach, L. I.
Covered with J-M Asbestos Stucco*

J-M ASBESTOS STUCCO

dries an attractive, uniform color which is permanent. ¶ Instead of sand, pure Asbestos rock and fibre are used. This makes J-M Asbestos Stucco a *stone* stucco—not merely a plaster like other stuccos. It has far more elasticity than other stuccos—isn't affected by freezing and thawing. Will stand indefinitely. ¶ J-M Asbestos Stucco is cheaper than Portland Cement and sand stuccos to apply owing to its light weight. And it makes the outside of a house absolutely fireproof. ¶ In prepared form, it can be furnished in white and various shades of gray, buff and brown. ¶ You will find it well worth while to look into all the facts—just write nearest Branch for booklet and sample.

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Your Neighbors Are Building Herringbone Houses

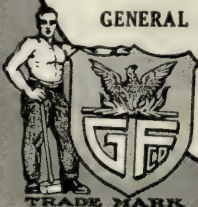
because they found that a stucco house built with **Herringbone Metal Lath** could be given an artistic individuality, which reflected the taste of the owner; and that such a house is the most economical type of construction.

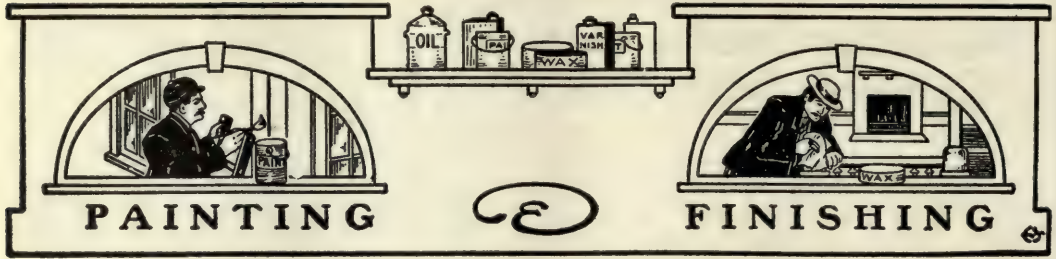
The cement plaster exterior of Herringbone Houses may be treated in many pleasing ways. No paint is needed to preserve or beautify it. A stucco house, instead of growing shabby, becomes more beautiful with age. Repairs and insurance are cut down to a minimum.

Send for complimentary copy of our handsome illustrated booklet showing many types of attractive Herringbone Houses. Mailed post paid on request.

THE
GENERAL FIREPROOFING
COMPANY

909
Logan Avenue,
Youngstown,
Ohio.





Stains on Brick.



HE brown, white and yellow stains which frequently disfigure brick buildings or walls are the result of a saline efflorescence which may sometimes be removed, according to the *Bibliothèque Universelle*, by washing with slightly acidulated water, when pure water proves inadequate. Prevention, however, is better than cure. The stains are caused by particles of soluble salts which have been carried to the surface by water and are then crystallized by evaporation. These comprise sulphates of potassium, sodium, aluminium, magnesium and calcium, the last being the one commonest found and the one most resistant to rain. Chlorides and carbonates are also often found. These salts pre-exist either in the earth or in the waters used in manufacture, or in the mortar or sand, the latter being especially the case near the seashore, where sand from the beach is commonly used without the precaution of washing with fresh water. The entry of salts into the brick may occur during the baking also when the coal contains pyrites. Care should be taken, says the *Scientific American*, to use water of low mineral content, especially as regards sulphates. Where only "sulphur water" is available it should be neutralized with a barium salt.

Removing Pencil Marks from Painted Walls.

Can you recommend a wash or solution which will remove pencil marks from plastered walls?

About the only available thing to remove chalk or pencil marks from plastered walls is a mild soap, preferably castile, and lukewarm water. Care should be taken not to use a strong lye soap. In offering this prescription it is assumed that the walls are painted with lead and

oil. For ordinary smudges and stains oftentimes a damp cloth rubbed over the surface will do the trick.

Removing Hardened Putty.

Will you kindly suggest a method of removing old, hardened putty?

There are several methods by which hardened putty can be removed. It can be softened by applying several coats of muriatic acid or by passing a heated iron over it. It can then be removed with a putty knife. Many painters pick it out with a chisel.

Paint the Screens.

If housekeepers only knew it, they might prolong the life of window and door screens almost indefinitely; the writer has some that are as good as ever after ten or more years of service. If brass wire screen is used the wear will be very long, of course, but the cost is great. Now if the house-frau, with the ordinary screens in general use, will only get a can of window screen paint in the early spring and apply it to both sides of the screens, just one rather dry coat, she will find that the wire will never rust and that the screen will look perennially fresh and new. First the screen should be well brushed to remove all dust, of which there will be plenty, as the screen acts as a sieve to intercept dust and fluff. Paint stores should sell lots of screen paint every spring. The painter may prepare it himself by thinning up drop black, ground in oil, with turpentine to the consistency of very thin paint, adding a little japan driers. Then add three times its volume of benzine asphaltum, and strain through cheesecloth. Thin again if necessary.—*Paint & Oil Dealer.*

What Are Paste Wood Fillers?

Compounds supplied in the form of a rather stiff paste for filling the "grain" of

Vitralite

THE LONG-LIFE WHITE ENAMEL



THE bright welcome of Milady is only equaled by the pure white woodwork finished with Vitralite, the Long-Life White Enamel.

Vitralite will make your home a haven of delight. Gives a durable, lasting and water-proof finish on all wood, metal or plaster surfaces, inside or outside.

Send for Booklet and Sample Panel finished with Vitralite, showing its porcelain-like gloss. Vitralite will not show brush marks nor turn yellow like ordinary enamels.

"61" Floor Varnish will make your floors heel-proof, mar-proof and absolutely water-proof. Test it yourself. Send for

Free Sample Panel

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The quality of P. & L. Varnish Products has always been their strongest guarantee. Our established policy is full satisfaction or money refunded.

Pratt & Lambert Varnish Products are used by painters, specified by architects, and sold by paint and hardware dealers everywhere.

Address all inquiries to Pratt & Lambert Inc., 121 Tonawanda St., Buffalo, N. Y. In Canada, 65 Courtwright St., Bridgeburg, Ontario.

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AMERICAN FACTORIES
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ESTABLISHED 64 YEARS

FOREIGN FACTORIES
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hard woods, so as to produce a level, non-absorbent surface for varnishing. They consist usually of finely powdered transparent or translucent mineral substances ground in a special type of varnish. They are applied by brushing, and, after setting and before hardening, the surplus is wiped from the surface of the wood. They may be colorless, or colored so as to utilize the "grain patterns" for decorative effect. In contradistinction to the so-called liquid fillers, which are merely transparent soft wood "primers," paste fillers are properly so called, because they are used to fill actual cavities.

Removing Paint From Glass.

Paint may be easily cleaned from glass by using a 50-per-cent solution of acetic acid. The acid should be heated and applied with a cloth. The hot acid will not hurt the hands or fabrics, nor the glass, but should be kept from children who might drink of it. The solution is made of commercial acetic acid and heated by adding hot water. The acid is inexpensive and can be purchased at any local drug store.

Cane-Seat Cleaner.

A rapid and practical method of removing stains and discolorations from the cane seats of chairs, wickerwork, etc., is to use oxalic acid and powdered pumice.

Dissolve oxalic-acid crystals in hot water and saturate a small stiff brush in it, then dip the brush in the powdered pumice and rub the discolored cane briskly with the brush.

Care of Oak Floor.

If one only knows how, nothing is easier than the care of a well finished oak floor. Water should never be used on a waxed or varnished floor. The surface may safely be wiped with a cloth dampened in tepid water to remove dirt and dust, but the dampness should be immediately taken up with a dry cloth.

One of the best mixtures for keeping a floor in good condition is the use of equal parts of sweet oil, turpentine and vinegar well mixed, and rubbed on the floor with waste or a cotton or woolen rag. The vinegar will cut the dirt or grime worked into the finish from shoes; the sweet oil produces a lustre and the turpentine promptly dries the moisture.

The above mixture need not be applied oftener than once a month to insure a floor finish that will resemble the sheen of a piano.

Should wax finish become worn in spots from hard usage, a little of this mixture thoroughly rubbed will renew the finish quickly.

The occasional use of a weighted floor brush, alone or with a piece of Brussels carpet placed beneath it, will assist in keeping the finish of an oak floor in good condition.

Once a year, it is well to use a good floor wax and rub it into the floor with the aid of a brush, with or without a piece of carpet attached. Before the finish is worn down to the wood, an additional coat of wax should be applied and thoroughly rubbed.—*Oak Flooring Bureau.*

Hard Woods Treated by Burying In Lime.

A special treatment of native woods for use in the better grades of furniture has been tried with success in Germany. Freshly cut birch, oak, elm, pine or spruce is buried in earth mixed with lime and other materials, and left for from three to five months. A remarkably fine color is imparted to the wood so that it can be used without painting or staining, and after this treatment it has practically no tendency to shrink or swell.

Brown Stain for Wood.

Bichromate of potassium gives a lustrous, rich, light to dark brown stain on woods. The crystals are first dissolved into a saturated solution, which is then diluted with water. The stained surface needs no rubbing, as the stain leaves the wood perfectly clear for any desired finish. The satinlike appearance of wood treated by this stain cannot be produced with any of the pigment stains.

A Cleaner for Brass.

In some recent laboratory experiments the following solution was found to cleanse brass very quickly without harm to the hands or the metal. An ounce of alum was put into a pint of boiling water and the solution rubbed on the brass with a cloth. Stains as well as tarnish were quickly removed. The solution is inexpensive and easily prepared.—*Popular Mechanics.*



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Roberds Ideal Wall Board is easily applied, sanitary, clean, durable. It makes the house warmer in winter and cooler in summer and more attractive all the time. It costs only half as much as lath and plaster.

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Saving Money on Water Bills.

Charles K. Farrington



THE ever increasing cost of living makes it necessary that no money should be wasted in household expenditures. Frequently a family pays far more for water than is necessary simply because it is not known that there is a waste. Many a householder who will never allow water to run to waste from leaky faucets, will lose a large amount from leaks which are not readily seen. It is the writer's intention in this article to explain how water thus runs to waste, the examples being taken from actual experiences. Often, the water begins to be wasted gradually, and for some time the waste is not readily noticeable.

How Water May Run to Waste Without Its Being Noticed.

Where water is available, all water closets in the average home have small flush tanks located over them. These tanks have "ball cocks" in them to keep them filled to the proper level with water. If the ball cock becomes leaky, and fills with water, the water will not be shut off properly and waste will ensue. Or if the washer on the ball cock becomes worn (and this it always does from constant use, being made of material which will wear out in time) the water will flow away uselessly. Now the average person is entirely unaware that this can happen, especially if the water closet is of the type now almost universally used, that is, the syphon jet closet. With the old style "wash out" pattern it was possible to detect the water running to waste by close observation. The average householder thinks the new syphon jet type are the same kind as the old wash out pattern, and thinks if the water cannot be detected running to waste it does not do so. Only the other day the writer found an instance of this kind where thirty-eight

thousand gallons of water ran to waste in six months' time, and a very large bill was the result; also this much water was wasted from the municipal supply at a time when the supply was much depleted by a long continued drought. Let me mention here that it is not the amount wasted in a single house that tells seriously upon the municipal supply, but it is the many similar leaks, most of them leaks which allow water to run to waste day and night, for months at a time.

How to Detect Leaks.

The water bill is too often the first indication to many a householder that water is being wasted. This involves a useless expenditure of money in many cases, for if the plumbing is carefully examined at intervals it is not likely to give trouble. All ball cocks should be examined by a competent plumber, and if they are but slightly out of repair they should be at once made right. Too often a householder will say "that leak is so small I will not repair it, it will cost too much money," not realizing that a leak ever so small will often rapidly increase into a large one, and that any waste of water is expensive and wrong. If the house has a large tank in the attic it should be examined to insure that the ball cock in it is in working order, and that no water is escaping down the overflow pipe. The overflow pipe of many of these tanks runs directly to a gutter on the roof of the house, and it is possible for much water to run to waste from the roof without its being noticed. Many houses have a large tank of this kind to supply various sections of the plumbing all over the dwelling. A very good way to detect an obscure leak is by ear. Place your ear close to the water pipe which supplies water to any fixture or section of the plumbing, and you can often then hear the water running. Follow up the

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MR. HENRY SCHONEBURG, Ft. Wayne, Ind., has had an Underfeed for five years. He says his coal bills average about \$27.50 per year for heating ten rooms, has had no repairs in the five years time, and pronounces the Underfeed the best furnace ever made—and he knows the Underfeed.

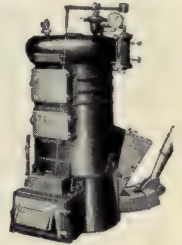
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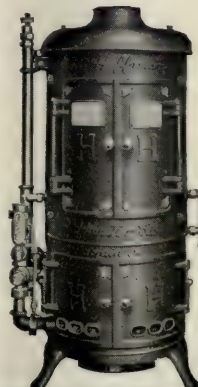
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The HOFFMAN is lower, much lower in cost than any other —It costs less to produce hot water the HOFFMAN way than any other way—The HOFFMAN never fails to produce pure, clean hot water the instant any hot water faucet in the house is turned on—The HOFFMAN is positive in action and needs absolutely no attention.

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pipe and discover where the water is being wasted. It is best to test for leaks at a time of day when no water is being used anywhere in the house. Usually this time is about nine o'clock in the evening. No hot or cold water is being used as a rule in the average home at that time. Faucets which need new washers on them to prevent leakage can readily be detected. Put on a new washer when the faucet first begins to drop water. Often the washer can be reversed if a new one of the same kind can not be found.

How to Determine if Water is Still Being Wasted After Repairs Have Been Made.

After repairs have been made to any suspected part of the plumbing system the householder wishes to know if the leaks have been stopped. This is difficult if one does not know how, and if the leak has been in an obscure place. The writer will mention two ways in which it can be known to a certainty if water is still running to waste or not. The meter man from the water company can take the meter record on the day the repairs were made, then in the course of a week he can look at it again and see if an abnormal amount has been used. If so, water is still running to waste. Or any householder can shut off all faucets and use no water anywhere for the space, say of an hour. At the start he must go down and note exactly where the pointer of the dial which registers the smallest amount of water is. Paste if you choose a tiny strip of white paper on the glass covering the dial, directly opposite the pointer. If the pointer moves (and the strip of paper readily indicates whether it does) water is flowing to waste.

How Much Money Can Be Wasted by Leaks of This Kind.

The writer has just discovered and remedied an obscure leak. A defective ball cock over a siphon jet water closet allowed thirty-eight thousand gallons of water to flow to waste unknown to the occupants of the house. This amount was in excess of the average quantity used during a period of six months. In addition to the regular bill for water,

\$9.50 had to be paid. This is not an uncommon instance. Large bills from similar leaks are constantly causing householders to pay money uselessly.

High Pressure of the Water Supply Sometimes Causes Waste.

Most towns and cities now have a good pressure of water, this largely being for fire protection. High water pressure sometimes causes the ball cocks to act improperly, especially if they are old. Most plumbing systems are equipped with a shut-off cock, located so the water can be shut off these small tanks when repairs are being made. Turn such a stop cock partly off. This reduces the pressure and allows the ball cock to work easily, and saves waste of water. These shut-off cocks are located usually very near the tank.

An Efficiency Living Plant.

A plan to work out the physical need-providing part of life in such a way as to take even less time and money than at present and to supplement this with individual, family and community development, is being drawn up by a group of people in New York City. In a general way the plan is to group family houses around a central plant in which will take place all the activities now carried on in separate homes but which, without loss of any other kind, can be carried on more economically in a central plant.

This will include, in varying degree, some or all of the following items:

Physical requirements—Heating, eating, washing, cleaning, repairing, storing and clothing (sewing).

An engineer has been consulted for the heating problem and it has been learned that from 20 to 25 families would be the smallest unit for maximum economy on that score. For the other points, a fund of information could be turned over to an architect with instructions to make a preliminary design and an estimate of cost of construction and maintenance.—*Heating and Ventilating Magazine.*

Relative Costs of Heating and Ventilation.

Too frequently ventilation is looked upon as a luxury and little effort is made to investigate it. A building may be

COOL DAYS A-COMING

Time To Think Of Furnaces

PREPARE yourself now for cold, snappy weather. Don't go through another season trying to coax heat from a poor furnace—don't burn up money in a fuel wasting stove or grate. Get a furnace that will heat your home healthfully, comfortably and economically and without trouble or repairs. Full furnace value and a whole life time of satisfactory service goes with every

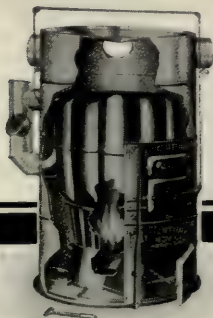
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The kind of fuel you burn doesn't matter—a XXth Century burns any kind from slack to coke—burns it without waste too from the side toward the center by means of an exclusive firepot and air chamber. *You actually get a third more heat or you save a third on fuel*—and the home is always free from fumes and soot because the furnace consumes its own gases and smoke.

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Where the family life is concentrated in small space, as in the bungalow and the craftsman cottage, a noisy toilet is a source of continual embarrassment. **The Pfau Toilet Combinations** operate quietly and cannot be heard outside the rooms in which they are located.

Old-fashioned toilets with their cumbersome tanks of china, enameled cast metal or wood, require large wall space and they look out of proportion to their surroundings. But the **Pfau Little-House Toilets** are all equipped with the

PFAU *white-copper* TANK

This tank is so small that it could be set inside of an ordinary toilet tank, yet it actually delivers more water and does more efficient work in flushing out the bowl than other tanks of much larger dimensions. Installed in connection with any water closet bowl of any type or size, this tank will make it modern, efficient and silent.

The Beauty of the Pfau Toilet Combinations appeals to the aesthetic sense of people of refined taste. The tanks and seats are finished to match each other absolutely, in shimmering white or rich mahogany, highly polished and burnished. They last a lifetime and seldom call for attention or repairs. Yet they cost even less than what you would pay for ordinary toilets of china.

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heated without any provision for ventilation, but, fortunately, building construction and materials have such porosity that close observers have reached the conclusion that in such cases there will be sufficient leakage of air to provide at least one change of air per hour. If the heating is done by stoves, heaters or radiators

placed within the room, only sufficient heat is necessary to replace the heat lost by this one change of air through walls and windows. If, on the other hand, the building is indirectly heated by a heater in the basement, a larger amount of heat will be necessary and the amount will be in proportion to the number of times the air in the building is changed. The loss of heat through the walls and windows must be provided for, and it is a common conclusion among those who are expert both in making observations and calculations, that the amount of fuel required to make up for the heat losses through glass and walls must be multiplied by 2, $2\frac{1}{2}$ or 3 to provide a comfortable temperature in the apartment when it is properly ventilated. This is why some men install larger heaters than others and why the systems installed by some contractors fail when extreme weather occurs. This is particularly true in reference to all kinds of indirect heating systems. A more careful study of this question by all who are engaged in this field should have a beneficial effect on the character and capacity of heaters installed. It also indicates the need of such educational work as will reach those who are less inclined to take up the necessary study to become acquainted with the facts in the case.—*The Building Age*.



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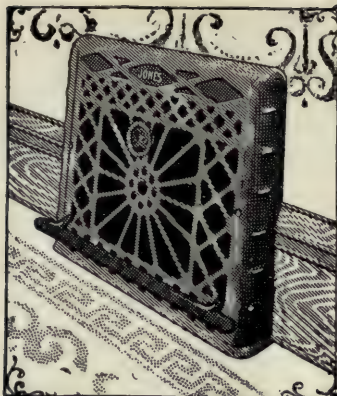
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That the filaments in electric-light bulbs may be broken by dusting the bulbs with a feather duster has been discovered by a series of tests conducted for the purpose of determining the cause of the short life of incandescent lamps furnished to an eastern school. The reason for the breakage was ascertained by putting a number of new lamps in circuit and after brushing them with a feather duster, turning on the current, when several of the filaments immediately broke. In another set of lamps wiped with a cloth, instead of the duster, there was no breakage, indicating that the trouble was due to the action of static electricity produced by the feathers rubbing on the glass bulbs.



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during the coldest weather may be secured by installing the "JONES" System of Heating, one principal of which is the heating of one room on two floors from the same basement pipe, insures not only a saving, but produces the results wanted.

Our improved "JONES" Side Wall Registers have been installed in over 350,000 of the most comfortably heated homes of the United States and Canada.

Send for Booklet, "HOME, SWEET HOME."

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SPLINTERS AND SHAVINGS

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REJUDICE is blind and unreasoning, tenacious of life and self-assertive. It raises its discordant voice long after the cause which gave it birth has been eliminated. Were it not so, short lengths of lumber would be in general favor instead of being sought by the relatively few who realize their worth.

Some dealers and some builders are so "sot" in their ways that they imagine the old standard of widths, thicknesses and lengths were ordained by Providence. They fail to sense the self-evident fact that logs are cut from trees, lumber from logs and that lumber is cut to fit the place or use for which it is employed, into narrow strips, short squares or into triangular form.

A carpenter will take a twelve-foot board and blithely produce from it eight pieces eighteen inches long, then gravely tell the dealer he cannot afford to bother with six-foot boxing, sheathing, siding, flooring, etc.

Why? He never has and therefore he concludes that he never should. His reasoning is specious, but it seems to satisfy the reasoner.

In making out a house, barn or repair bill the contractor calculates the number of feet of siding, boxing, sheathing and sub-floor material he wants by ascertaining the superficial area to be covered and adding sufficient to cover wastage in laying. About the only statement he makes regarding lengths is that a certain portion should be sixteen feet long, the remainder preferably twelve and fourteen foot stuff.

With this important feature of his lumber bill thus summarily disposed of, he makes an elaborate calculation showing the number and length of joist, studding and rafters he requires, usually specifying an extra lot of "sixteens" for cripples. The great reason for his course is that such methods of procedure have been customary and the individual seem-

ingly has not sufficient initiative to get out of the old rut, particularly as his dealer never has shown him it would be to the advantage of both to get out of that rut.

Very little time is required to take off the spaces between openings, gables, sides of dormer windows, etc., where bevel or drop siding is used, and to ascertain the quantities of other short material that will fit in nicely. Most of the short stock can be used absolutely without waste, thus effecting an actual saving in the quantity of material it is necessary to order as well as getting a considerable part of it at less than the price of regular length stock.

In an ordinary house covered with beveled white pine siding, there is room to use to advantage short length material in about the following proportions:

400 feet of 2, 3 and 4-foot stock.

600 feet of 5 to 9-foot stock.

1,200 feet of 10-foot and longer stock.

The 2, 3 and 4-foot stock will cut without waste in 8, 9, 12, 16, 18 and 24-inch spaces and the 5 to 9-foot stock can be used to advantage to cover openings between windows, doors and for the gables. The longer lengths can be used above and below the windows. Examine any frame house and note the large percentage of short lengths used.

Sheathing can be ordered in about the same lengths as the siding and the short lengths will work in to equal advantage.

There are others. Look for them, but do not forget the economy of short lengths of white pine and Norway pine siding, sheathing, shiplap, ceiling and flooring.—*The Pine Cone*.

Where Conveyance of Property Is Made Free from Incumbrance.

The plaintiff and defendant were each the owners of one-half of the certain parcel of real estate known as lots Nos. 97 and 98. The defendant, by a full-covenant and warranty deed, conveyed to the

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STANLEY'S
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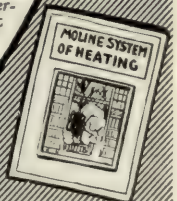
The Vacuum-Vapor System that heats at tea-kettle pressure, requires no expensive pumps and apparatus, is instantly responsive, absolutely noiseless and always under complete control. *Saves 25% on fuel* and, in every way, proves more satisfactory than steam, hot water or any other system. Ask us for *proof*, which we'll gladly submit without obligation of any kind.

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Moline, Illinois



plaintiff his one-half interest in the property in question, and warranted that said interest was "free from all incumbrances." The evidence shows that a building on the property conveyed encroached on the adjacent property on the north 1.49 feet and on the south 1.41 feet, and that a cesspool attached to the building encroached on the adjacent property 1½ feet. The court awarded judgment for the defendant, holding that the fact that some part of the land conveyed encroached on the adjoining property did not constitute a breach of the covenant against incumbrances contained in the deed. The plaintiff appealed to the higher court, which ruled that the existence of the incumbrance caused damage to the plaintiff, and the expense which was incurred in its removal may properly be recovered as damages, provided that the damages recoverable shall not exceed the purchase price, with interest. Under this rule, the

plaintiff could not have recovered more than \$250, which was the amount of the purchase price of the one-half interest which he acquired in the property from the defendant.

The encroachment of the building upon the adjacent land created a right in the owner of the adjacent land, which, while it did not interfere with the passage of the fee, did impair the value of the property conveyed by the defendant to the plaintiff. Under the circumstances disclosed by the record, the encroachment was material and substantial. It was, therefore, an incumbrance, and as such within the terms of the covenant.

It follows that the judgment should be reversed, with costs to the appellant, and judgment should be awarded to the plaintiff for \$250, together with costs taxable in the Municipal Court.—*Real Estate & Insurance News.*



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It tells all about the proper method of finishing floors and interior woodwork, and improving furniture. A big help in beautifying the home—new or old.

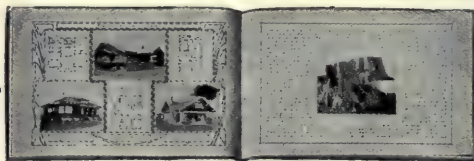
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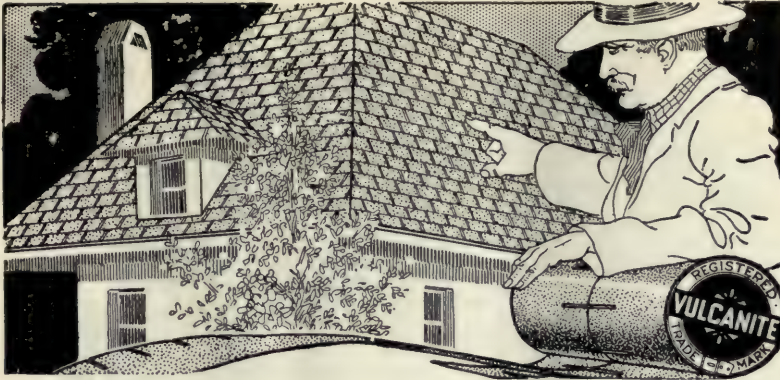
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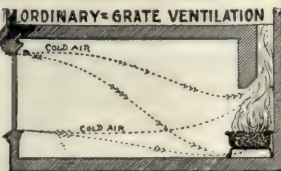
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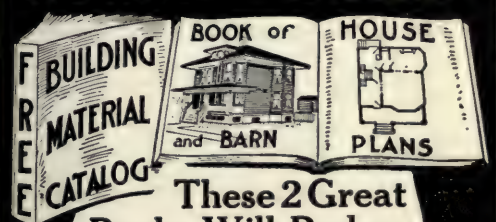
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New Booklets and Trade Notes



THE Grand Rapids Furniture Co. sends us a copy of their publication on Cabinet Making, by J. H. Rudd, Barnstable, Eng., a comprehensive volume of over 200 pages in boards, which is in line with the series published by this firm. While primarily written to meet the needs of the cabinet-maker, the increasing demand by the manual training teachers in the school for a simple and concise text-book on cabinet making has had a share in the preparation of this volume. The book is illustrated with drawings of the pieces of furniture described, and deals also with the measuring of rooms for finishing and paneling. Price, \$1.50.

* * *

The Atlas Portland Cement Co. issue a little white booklet called "White," with sub-title—What It Is and What It Is Used For. The booklet is useful to clarify the rather vague ideas most people have about Portland cement.

* * *

The booklet of the Follansbee Bros., Pittsburgh—Scott's Extra Coated—sets forth the advantages of their roofing tin, with many illustrations of buildings and residences where it is in use.

* * *

"Doorways" is a booklet sent out by the Richards-Wilcox Mfg. Co., Aurora, Ill., with a live talk on door fixtures and their specialty in particularly—a hanger for any door that slides.

* * *

The Johns-Manville Co. send us a valuable booklet of specifications for their asbestos roofing and waterproofing product. Builders and architects will derive good assistance in installing this roofing from the concise and intelligent directions given in this booklet.

* * *

"Concrete Sidewalks, Pavements, Curb and Gutter," a book recently issued by the Universal Portland Cement Co., covers briefly the underlying principles of

good design and good construction, and includes the specifications of the National Association of Cement Users, as presented at their December, 1912, meeting. The broad policy of the Universal Portland Cement Co., in making a wide distribution of helpful books, has done much to assist contractors in planning better methods of work.

* * *

A new shingle stain has appeared upon the market which is attractively set forth in a small booklet, entitled Velvex, sent out by the Barrett Manufacturing Co., New York and Boston. The booklet reproduces in color many of the stains, and gives directions for use, together with quantities required and prices. The color effects are very soft and pleasing, and are said to be permanent.

* * *

Direct from the Wheel is the last word of the Pfau Pneumatic Water System, Milwaukee, Wis., showing the application of their system to domestic uses, and its points of difference from other systems. One of these points is the absolute elimination of the storage of water, which is made possible by the operation of the Pfau Pneumatic Pump, maintaining an evenly high pressure of water at the faucets. The booklet is forwarded on request.

* * *

Architecture and School Hygiene.

"The relation of school architecture to school hygiene" will be one of the important topics on the program at the Fourth International Congress on School Hygiene, which is to be held at Buffalo August 25-30.

A special symposium is being arranged on the subject of school illumination by the Society of Illuminating Engineers. Dr. James Kerr of London, England, for many years an active member in London Council, and an international figure in affairs relating to School Hygiene, will read a paper on "The Illumination of Class Rooms." "Recirculation and Venti-



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Keith's, Sept., '13

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lation" is the title of the paper to be given by Dr. Luther Gulick of New York. Other papers on the subject of architecture will be read by Frank Irving Cooper, president of the Boston Society of Heating and Ventilating Engineers, who will speak on "The Planning of Schoolhouses Against the Fire Hazard," and by Prof. Theodore Hough of the University of

Virginia on "Some Aspects of the Problem of Ventilation."

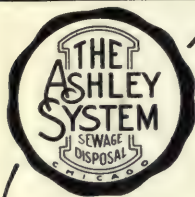
* * *

Among the applicants for popular favor in Wall Boards, is the Philip Carey Co., Cincinnati, for many years manufacturers of building materials. Their new booklet, "Beautiful Walls," in its cream and brown cover with gold bronze lettering, is certainly artistic advertising of their product Ceil Board. The excellent illustrations are supplemented by clear and explicit directions for the use of this Wall Board.

* * *

"Modern Lighting of Country Homes" is sent out by the Alex. Milburn Co., Baltimore, whose specialty is the lighting of isolated homes by the "Homegas Machine," with acetylene gas. Small machines for as low as sixteen lights are now manufactured which bring the comfort of clean and pleasant lighting and cooking to the small home as well as the large.

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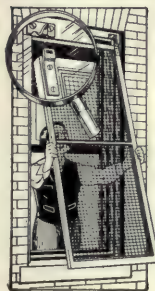
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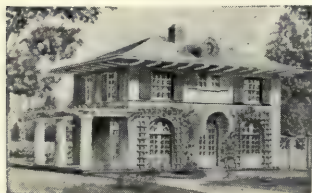
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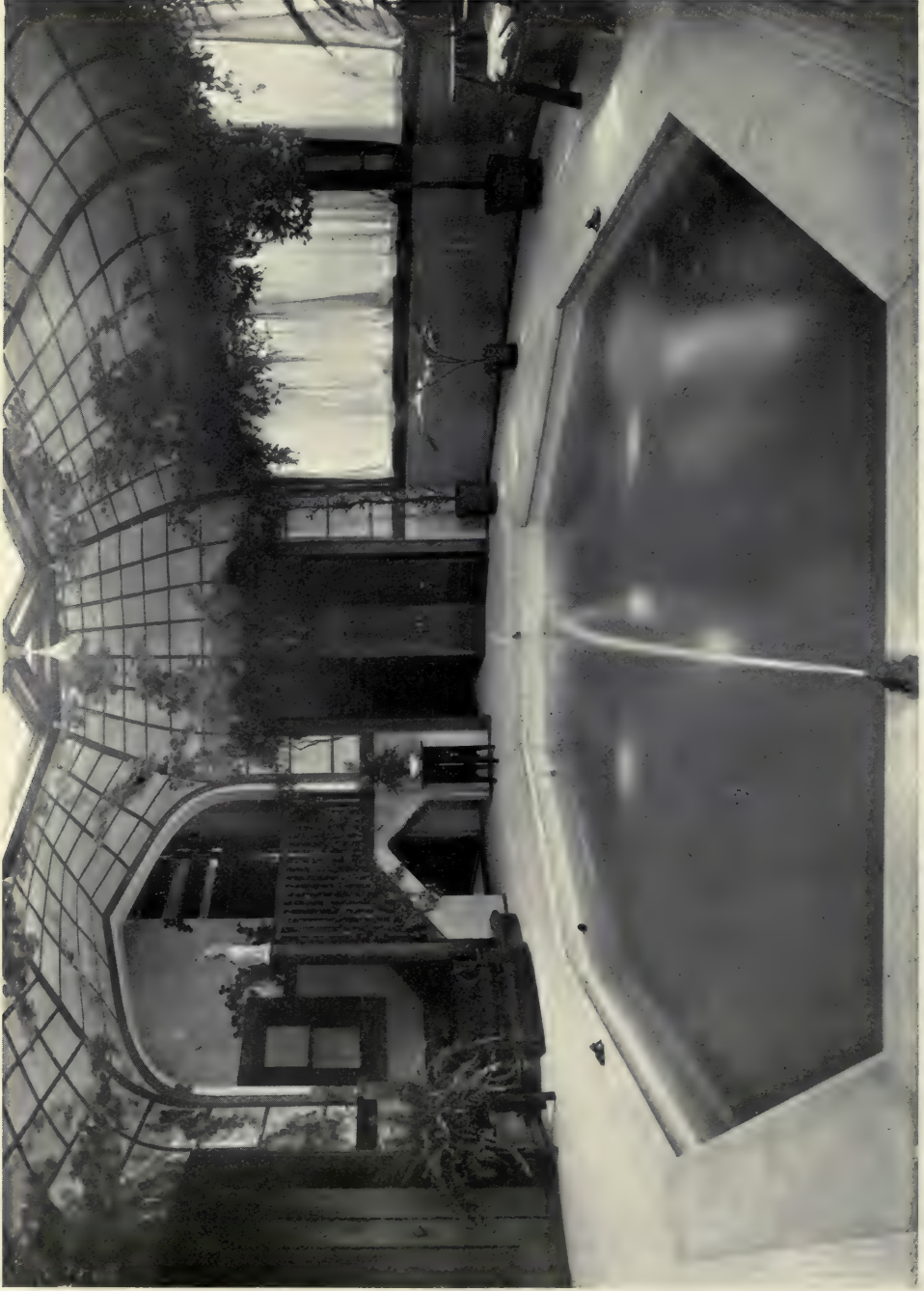
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SWIMMING POOL IN RESIDENCE OF W. J. KEITH.—THIS ROOM IS OCTAGONAL AND ADMITS FLOODS OF SUNSHINE.

KEITH'S MAGAZINE

VOL. XXX

OCTOBER, 1913

No. 4

When An Architect Is His Own Client

By Mary Moulton Cheney



IN ORDER to discuss our subject in terms harmonious with its salient features, limited space compels us to make the most of a few well-chosen words; for this particular house, the work of an architect experienced in fashioning structures more or less in obedience to the dictates of a changing and a changeable clientele, is the expression—frank and unostentatious

—of his conception of simplicity in construction, guided by the happy requirements of his own household. The result unmistakably acknowledges a fondness for the type of design in the heart of the English in many of their own constructions known as Tudor; it is not imitative, but rather the outcome of friendly association with things held admirably suited to the needs of modest home building,



FRANK AND UNOSTENTATIOUS.



AN IMPRESSION OF ROOMINESS, OF RESTFUL LINE AND OF HARMONIOUS TONE.

this special interpretation of the style evidencing pleasing adaptation to the natural conditions of the site and to the functions of this particular bit of home life.

Just before the easy ascent of the avenue which the house faces reaches its crest, and before its laterally curving confines are spent, very broad stone steps open a most cordial way to a rather square porch characterized by Tudor arches. Pausing while waiting the greeting, our eyes are met by sunny and inviting windows, by a varied ground-line softened with hardy shrubs displaying deeply colored fruits and by thrifty geraniums rich in scarlet bloom. The walls of the house are of pressed Menomonic brick—varied soft reds in Flemish bond, the joints in natural gray cement sunken,

in width three-quarters of an inch—presenting a very attractive exterior. The copings of the porch and walls are of gray Bedford sandstone.

The large single-panelled front door swings before us; a broad and inviting entrance, an impression of roominess, of restful line and of harmonious tone, easily persuades us we are welcome guests to the best the house affords. The hall is in fumed oak; has English tapestried walls, a deep oak dado, a plastered panelled ceiling in ivory tints, a rug in dark blue—much patterned in dull tan, yellow, rose, old blues and neutralized green—portieres of dark blue and ecru, filmy straight drapes, relieving the severity of the broad, leaded side lights and the center light of the front entrance.

Directly opposite the front door is the

stairway. The stairs are of solid cement construction overlaid with marble, delicate rose in color; the oak panelling finishes flush with the marble, affording no lodgment for dust. Forming an obvious balance, there is a spacious coat closet on one side of the stairway, and on the other a door to the passage-way which gives opportunity for immediate service by the maid. On each side of the hall broad, inviting doorways, flanked in lieu of casings by half octagonal pilasters whose caps are carved in wistaria motifs, contribute generously to the feeling of breadth. On the left is the living room.

The living room—17x30—is defined by solid mahogany construction, panelled to the window sills; the ceiling is barred by heavy beams relieved by a deep frieze. The front window, affording a view of the avenue, and of a well-kept city triangle, is divided into three portions ren-

dered attractive by broad, leaded panels extending across their tops; inviting day-enports and chairs upholstered some in green tapestries and others in brown leather, oriental rugs harmonious in coloring, and other things expressing good taste contribute to the pleasing reticence of this room.

The extreme south end of the living room, which is the library, is flanked by plain book shelves curtained in a dull blue fabric. The principal feature of this part of the room, as well as of the entire room, is the broad fireplace, which accounts for the major portion of the wall. The over-mantel is formed of beautiful pieces of crotched mahogany inlaid in a wistaria pattern with iridescent glass, thus producing a splendid rhythmical play of color-harmonies. The glass effect is carried around the fireplace and into the geometrical scheme employed in the



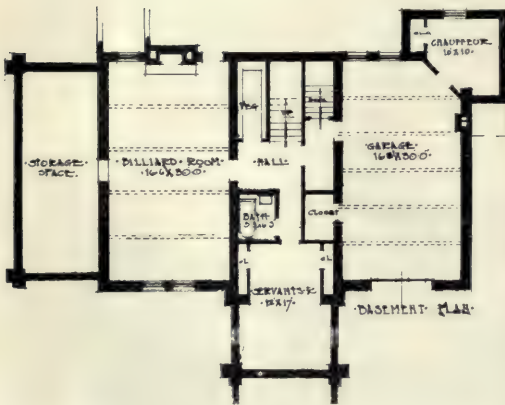
THE PRINCIPLE FEATURE OF THIS ROOM IS THE BEAUTIFUL OVER-MANTEL.

hearth; stocky, good-looking andirons support the fire basket.

On each side of the fireplace there is a French window—the one on the left opening onto a sun balcony, the other onto a balcony which by a short flight of stairs leads down into the conservatory and “plunge” room. This room is octagonal in shape, has a groined ceiling, four groups of side lights and overhead lights, thus providing for floods of sunshine; vinous units used in the wall and ceiling

storage, the entire house to the attic being of reinforced construction.

On the same level as the billiard room there is a double maids' room—light, airy, with two clothes closets and private bath for their use. Slightly above this level, entrance is gained to the laundry, laundry yard, and from the front sidewalk grade entrance is had to the garage. The garage accommodates three cars; adjoining it is the chauffeur's room and opposite is the door to the boiler room in the



decorations, together with four streams of water playing from sturdy, metal frogs' throats into the pond combine in giving an out-of-doors feeling. The floor is of tiled marble; on one side of the room there is a small alcove for the removal of wet garments, and on another side a lavatory and a passage-way leading to the billiard room.

The billiard room, in a half basement, is finished in oak; the walls are decorated with Dutch scenes; the floor is carpeted in red; a red brick fireplace features one end of the room; the ceiling is finished showing the concrete beams in plaster; through an arched opening the splashing of the fountains may be heard. Beyond this room there is a concrete room for

sub-basement, extending entirely beneath the garage and driveway entrance, through which latter the fuel is dropped.

Returning we pass through a fully-equipped kitchen, the sink fits into white enamel, the floor covered with “battleship” linoleum cemented direct to the concrete floor slab; opening out of the kitchen is the maids' dining and sitting room, lighted through casement windows, and through this room there is a street entrance for the servants and for the trades people.

Passing through the butler's pantry we enter the dining room, a very happy room in fumed oak, wainscoted to the frieze. The ceiling is supported by heavy beams and its panels are finished in a dull gold

fabric effect. The south wall is portioned off by the buffet designed in beautiful, simple lines and without glass, giving a very chaste and rich effect, also on one side by a single-panelled door to the butler's pantry, and on the other by a door to the pass closet. On the avenue side there is a splendid, large window, a broad window seat, radiators concealed by the seat, and on the west end a moderate-sized window. The windows are curtained with a sheer ecru material and with a heavy red over-drape. Oak furniture and an oriental rug warm in tone complete the room.

Re-entering the main hall and passing beneath a Tudor arch we ascend the stairs, overlaid with ample, well-chosen rugs. On the sunny landing are plants and a tall clock; the hand-rail and baluster, very substantial in appearance, are neatly adapted from the Tudor. The stairway is open and of the same design throughout to the third story.

The second story has five bedrooms and two bathrooms, the latter equipped with every modern convenience. One of the sleeping rooms is finished in birch,

mahogany finish, one in mahogany and the rest in white enamel. The walls of this floor are in delicate shades, such as gray, pink and green. Dainty curtains and flowered overdrapes, bedspreads to match, help to make up the charm required in the sleeping apartments of this home. A vacuum cleaner, a house telephone system, a silver safe and other similar appurtenances render the house very complete.

The third floor is devoted in the main to a ballroom finished in fir. The ceiling finish is carried down to a point about five feet from the floor; the space beneath is curtained with a greenish-brown stuff. This space to the eaves is very accessible for the storage of trunks and packing boxes. The ballroom—forty-nine by twenty feet—accommodates about forty couples.

On leaving we carry with us a satisfying impression of strength of construction, of wealth of coloring, from the red-tiled roof to the green of the lawn, and of the many liveable qualities embodied in one city house.

A Twentieth Century Renaissance

The Revival of Brick Construction

By Henry K. Pearson

"A Tudor-Chimneyed Bulk of Mellow Brick Work."



IN architecture we are accustomed to speak of the Renaissance as a style of art which prevailed at that epoch marked by the revival of the classic in Europe in the fifteenth century which pervaded learning and all the arts, but in particular architecture.

In this twentieth century we have a little American Renaissance of our own in the wonderful developments in the manufacture of clay products generally and

of brick specially. While the Old World has for centuries builded with brick and stone, Americans are just awakening to the merits and the charm of this material. And yet we abound in a wealth of brick material. Dear to the heart of the architect is the old English Tudor type of design, with its many-paned, mullioned windows and turreted parapets, and not infrequent is the modern adaptation of this style, for which brick is the



HOME OF MR. FRANKLIN CROSBY, OF GRAY ROMAN BRICK.

true exponent. It was natural that the New World would turn to its mighty forests for material to construct their dwellings. Wood was plentiful and it was easy to work with. But a new era is dawning in construction. A wave of enthusiasm for brick is sweeping the country. This new interest is of very recent growth indeed, for a couple of years back the cement people were ap-

parently having everything their own way. It is now a race for front place between these building materials, with brick coming on at a pace. It is a race which brings only good to the general public, for the keen competition has stimulated design and quality in both materials, to the great advantage of home building.

Ten years ago the common light-colored "Milwaukee" brick—ugly in color and dingy as it aged—together with our old friend, plain red brick, for the exterior wall or the fireplace within, comprised the repertoire of the brick trade. Now, to go through a first-class, up-to-date brick sample room is like a tour through a silk store, so rich in color and texture, so varied in effects, so wide the choice in the samples laid up in attractive and artistic panels.

Such a tour is indeed a revelation to the average person, to whom brick means—well, brick, and who look in amazement at the hundreds



A Minneapolis Residence Built of Colonial Brick Laid in White Mortar.

of different shades of color and textures. They have seen brick in big commercial buildings, on sidewalks and for street paving, but they know nothing of the late development of its esthetic possibilities in modern brick work.

Not only are the regular 2x4x8-inch sizes varied by new shapes, wider, flatter

deep. Mechanical accuracy in laying up brick is no longer a desideratum; rather variation in surface and a blending of different tones. Added to the variations in the structural joints, the wide range of color and texture make the possibilities in brick designs endless and fascinating. Some of the colors and shades of the "red



HOUSE OF TAPESTRY BRICK AND PLASTER.

and longer than the old style, but they are set with infinite variety of mortar and of joints. One of the points of interest in brick work is the tone of color which a difference in setting produces. For instance, red brick, pointed up with white mortar, will give a wall almost pinkish in color, while the same brick laid up in gray mortar will show a dark, purplish red surface. One would hardly believe that Coon Creek Matt laid up in double Flemish bond in dark mortar left flush could be the same brick as when laid with deep cream mortar raked out

group" are as rich in value as an Oriental rug, and as full of interest. Coppery shades, Bokhara reds, darker purplish tones with tints of green, rich blues and yellows, are blended and fused together, till the effect is of a rich tapestry hanging. Or we may see such a color group used as panels set in contrasting plain wall spaces, or as a fringe under the eaves. The "gray group" runs into russets and grey-browns, fawn and creams. The "golden group" includes delicate tans and deep golden browns. These are the groups that are so decorative in fire-

places and so harmonious with interior woodwork.

There is indeed quite a movement on foot looking toward the use of brick for interior as well as exterior walls, substituting specially-treated brick for interior plaster. So far the use of brick has been limited to interiors of public buildings,

tiffs is shown in the doorway illustrated, where St. Louis Matt brick in soft, coppery brown, lighted up with touches of red and shading into creams and gold, is used for the pillars of the entrance. Tile insets in bright blue and terra cotta give a decorative effect, in harmony with the touch of color in the leaded glass panels



RESIDENCE OF MR. WM. WHITLY, ON PALMER SQUARE, CHICAGO.

churches, restaurants, etc. Decorative as some of these effects surely are, it is doubtful, however, if they can be successfully adapted to the interiors of houses, where the more yielding qualities of wood and plaster seem more appropriate. But for fireplaces or for the tiling of vestibule walls and floors the new brick are delightful. For the ubiquitous "sun parlor"—now considered a *sine qua non* of the modern house—or the more open loggia, the soft and mellow tones of brick are a most desirable treatment. How admirably brick lends itself to entrance mo-

of the door. The strong, craftsman-like treatment of the door brings all into sympathy.

Within the limits of a brief magazine article it is impossible to go exhaustively into all sides of the use of brick. Uppermost in the minds of most home builders comes the question of cost. As to the economy of brick, there are several kinds of economy, and it is hardly fair to leave out of the cost question the difference in up-keep, the reduction in fuel bills, the increased comfort and the lessened deterioration of the brick house. It always



RECENT BRICK CONSTRUCTION IN CHICAGO.

has a good market value. These features all enter into the question of comparative cost. But putting them aside, the difference in actual first cost is much less than is commonly supposed.

It has developed that brick, even the beautiful modern Matt varieties, is no less adaptable for the three or five thousand-dollar cottage. On another page is shown a group of brick cottages, ranging in cost from \$2,500 up to \$5,000.

The houses here illustrated are photographs of recent brick construction in Minneapolis, with two Chicago homes. The first example is a fine architectural composition, and is the home of Mr. Franklin Crosby in Minneapolis. The external walls are of gray Roman brick laid in English bond, though the architecture has somewhat the feeling of the Italian school, and interest is given the plain surfaces by the pattern work used around the entrance and window openings. An unbroken roof of red tile, with a simple

ornamental cornice coping in terra cotta over the entrance and end gables, together with belt courses of white stone,



Entrance Detail for Brick Dwelling.

make up a refined and dignified exterior whose restraint is its charm.

The two next houses are Minneapolis dwellings of moderate cost, in which colonial brick is used for the walls of the first illustration, with trimmings of white cut stone, and the windows are set in white frames, giving a cheerful exterior. The panelled effects over the front porch offer an agreeable variation.

we show an example of a recent use of brick by an English architect, in an adaptation of this material to the Georgian style. We can but admit the charm of this simple but felicitous composition, and its superiority over some of the designs of our own architects when they wish to adapt this style to modern city dwellings, who seem unable to think of any other expression of the style than by



ADAPTATION OF BRICK TO THE GEORGIAN TYPE, BY AN ENGLISH ARCHITECT.

In the third illustration we see how delightfully brick combines with cement stucco to form an attractive low-cost exterior. It would be most undesirable to repeat in residence work the commercial aspect of the business structures, and such combinations lend interest to both materials. Especially is this the case in the smaller dwellings. The following example is of interest as embodying recent ideas in brick houses of the larger class in Chicago and is the handsome residence of William Whitly, on Palmer Square. A variety of motifs introduced into the brick work are used to give interest to this rather heavy composition. Finally,

the use of immense, florid two-story columns that offend by their pompous and pretentious air.

Indeed, it would be difficult to improve upon the countless examples of the old brick houses still standing today, stable and permanent as generations ago, and possessing a rich and satisfying architectural charm. In a way those old houses are closely related to this beautiful example of English design, which proves that the beloved Georgian or colonial can find adequate expression in brick as well as wood. The summer home of President Wilson at Cornish, N. H., is an interesting example of this type, modeled upon lines similar to our illustration.



THE BRICK WALK ON WHICH THE GARDEN ENTRANCE OPENS.

Brick for Garden Walks and Walls

ONE of the happiest features of this revival of brick is the return in landscape gardening to the brick walks and walls of olden times. And now we have again the quaint brick walks of the old colonial days with their edgings of box and mari-

golds, but we have far more. Delightful is the broad brick terrace, upon which the white-latticed trimmed door of the garden entrance opens from its own level, flanked, mayhap, with little evergreen trees in pots.

Brick steps lead from lower to upper



BEAUTIFUL GARDEN WALL OF TAPESTRY BRICK ENCLOSING THE GROUNDS OF A SPOKANE RESIDENCE.



A MINNEAPOLIS GARDEN WALL OF BOKHARA BRICK WITH HEDGE OF ROSA RUGOSA ON TOP.

our own grounds instead of the open, unmarked lawns heretofore common. True, we do not build high, prison-like walls around our homes such as our Old World cousins affect, but we have discovered the indefinable charm in the "garden wall."

Some of these enclosing walls around Minneapolis homes are here illustrated, one showing a wall of colonial dark brownish red brick crowned by a hedge of *Rosa Rugosa*, whose gay, bright blossoms in summer are followed by the even more brilliant effect of the large, bright red haws among the green leafage in the fall.

We have our own hardy vines, with a beauty and luxuriance as great as those

of semi-tropical lands, such as the native bitter-sweet, whose scarlet-orange seed pods against a soft gray wall make a picture of color. Or the *Clematis Paniculata*, with its clusters of starry white bloom against the red tones cannot be excelled, and which is in glorious bloom in September when other blooms fail. The Japanese Honey Sweet, which trails with such grace on the soft gray brick wall of another Minneapolis garden, is as lovely as the southern myrtle.

We cannot have the wonderful double roses that hang over the Mediterranean walls in glorious profusion, but that old standby, the Baltimore Belle, is a faithful ally, and even the Italian roses are not



LOW WALL OF LIGHT GREY BRICK WITH CREEPING VINES HANGING OVER.



BRICK PERGOLA—RAVENSWOOD MANOR, CHICAGO.

more beautiful than the pink clusters of the Dorothy Perkins.

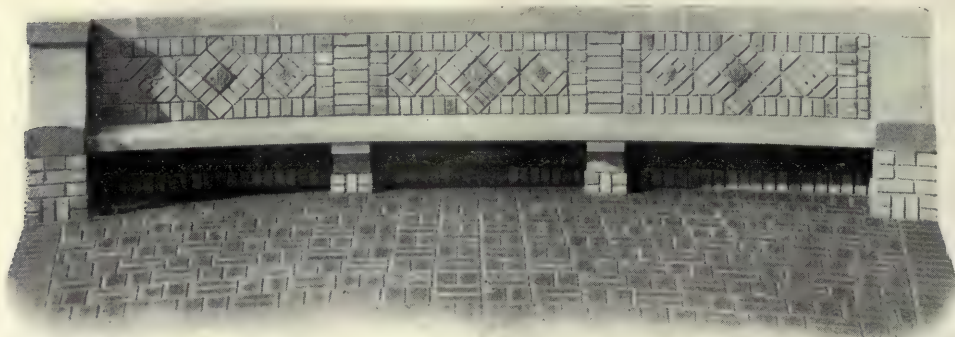
To be sure these roses must be covered in winter, but what of that? One wonders why that darling of flowering vines, the *Rosa Wichuriana*, which runs so fearlessly along the rocky banks and walls in Massachusetts, is not more assiduously cultivated in other cold climates.

Then, when roses are done, there are daisies, most effective grown on a wall, and our humble friend, *Portulacca*, which crowns many a wall on the Riviera, and sows its own seeds so faith-

fully as to need no renewing.

A few years ago brick would not have been thought a sufficiently flexible material for such decorative uses as the garden pergola, but the beautiful example here illustrated, alternating brick pillars with concrete, is most suggestive of its possibilities.

The observer in such matters can but note the increasing beauty of architectural detail, both as regards the dwelling and its accessories, and the quickened interest, not only of the architect, but client.



THIS GARDEN BENCH IN THE GROUNDS OF E. J. WHEELER, INDIANAPOLIS, IS EXECUTED IN CEMENT AND MEDIUM GRAY MATT BRICK WITH PANELS OF GOLDEN MOTTLED MATT.

A Group of Brick Cottages



HIS attractive group of cottages proves that brick as a building material can be adapted to small dwellings with success, as well as large and stately ones.

Beauty and individuality are shown in

ent in design from many hundreds, so their gain in appearance seems due to the brick material alone.

Even when the whole house is not built of brick the addition of brick enclosing walls for the porch and pillars



A MINNEAPOLIS COTTAGE, WHERE GOLDEN-ROD MATT BRICK IS COMBINED WITH RED CEDAR SHINGLES, SIMPLY OILED.

A COTTAGE AT SUNNYSIDE AND THE RIVER, CHICAGO. HOME OF HENRY E. CORDELL.



these small houses, for these qualities can be as truly expressed in the cottage as in the mansion.

One can but note the dignity and air of substantiality which is given these small houses by the material used in their construction. They are not differ-

ent in design from many hundreds, so their gain in appearance seems due to the brick material alone. Even when the whole house is not built of brick the addition of brick enclosing walls for the porch and pillars and buttresses of the same give an air to the whole house, a "toning up," which a woman accomplishes when she adds a collar or a *fichu a la mode* to a rather ordinary gown. This is just what has been done in the first illustration, where the brick porch, steps and pillars are the



BUILT OF HY-TEX COON CREEK LAID IN RUNNING BOND.

making of the house. There is interest given by the gamut of lovely browns and reds in the Bokhara matt brick, introducing deep, purplish tones with browns and reds, and blending in with the velvety browns of the oiled shingle, which no other device of such simplicity would have achieved. We have in mind a similar cottage just completed, where a porch of this character, but built of Coon Creek matt, showing greater variations of col-

or, but with the brown note the strongest tone, was laid up in wide joints of deep cream mortar. The first story of this cottage was a creamy gray plaster; above the plaster were the softly blended browns of oiled shingles, with roof shingles stained a deep, velvety brown. Cream white window sash and cornices gave the needed light touch, and the whole was a symphony of happily blended material and color.

Hints on Building a Satisfactory House

In Two Parts—Part I—Outside the House

By Charles K. Farrington



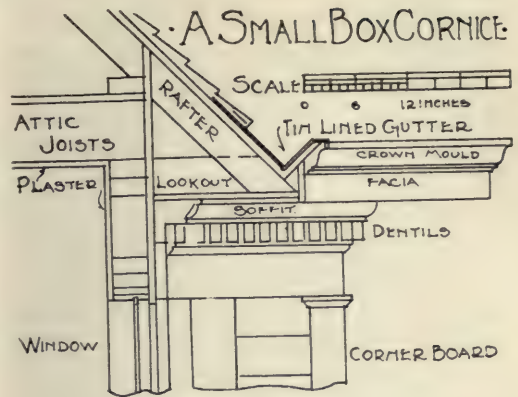
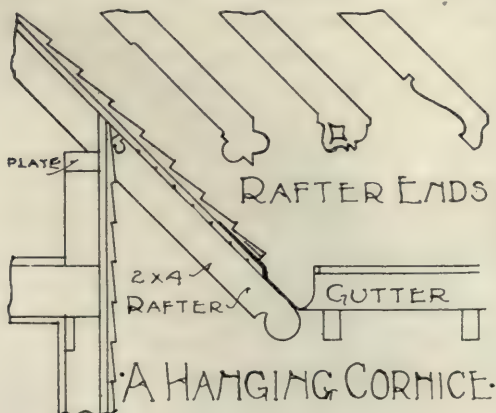
THE following ideas were incorporated in the plans and specifications of a house designed primarily with the idea of sparing the wife of the owner as much labor as possible, for the reason that she desired to do much of the housework herself. But another controlling factor was the desire to obtain a house which could be kept in

good repair at a minimum of expense. Many and many a house is being built these days, for families of moderate means, where a design as has been just mentioned would prove especially welcome, for the greatly increased cost of living makes it imperative that there should be no unnecessary expenditures in the first cost of the house, or in the ex-

pense afterwards of keeping it in repair or of heating it. It will astonish the uninitiated to learn how much money can be wasted if due precautions are not taken at the start. The writer plans to mention in this article, in language which can be understood by the non-technical reader, a number of hints which can be used by the prospective house-builder in his or her plans and specifications. For the reason that individual needs vary so much, plans for a complete house will not be given. Most persons desiring to build know what they need as regards design, size, etc., but they too often are not aware of what might be called "economy of comfort hints." These the writer will mention in detail. They can be used to advantage in many different plans and specifications, and are the result of actual experiences. Ofttimes it is possible to learn more from the mistakes of others than you can from their successes. The writer, therefore, will mention things to avoid as well as ideas to use.

Outside the House

The writer saw a fine cement sidewalk from the street to the front piazza of a modest home torn up the other day because the sewer connection had been laid underneath it and a defect developed in the piping, or rather the piping became stopped up and had to be dug up. Never allow gas, water, sewer or any other pipes to be laid underneath your cement walk.



We found in our old home that it would be wise in our new house to lay out a simple plan of where our main sewer connection from house to sewer in the street was laid. We had trouble from the pipe stopping up between the house and the sewer, and much time was wasted when the plumbers arrived in endeavoring to find the location of the pipe outside the house. This may seem an easy thing to do, but it is a very difficult thing to accomplish, even, as in this instance (an unusual one), where the same firm of plumbers who laid the pipe in the beginning were employed to discover the source of trouble. Sometimes to further complicate matters pipes are run from different sections of the house plumbing and connect outside underneath the ground with the main sewer pipe, this pipe, of course, going to the sewer in the street. Draw an outline of your cellar on a sheet of paper and mark upon it the distance the pipe is from the cellar line in its course to the sewer in the street. Mark with a stone chisel on the curb exactly where the sewer connection passes. It will seem unnecessary to the uninitiated to do this, but when a man is employed to dig some six, or even more feet down through hard ground to find a pipe it is well to know exactly where the pipe is before he starts to dig. We wasted quite a good deal of money in doing this work in our old home, simply because

we did not know within three feet of where the pipe was laid. Insist that "clean-out plugs" (these allow an opening to be made in any sewer connection for cleaning purposes) shall be placed at intervals between your house and the street connection with the main city or town sewer. Our old home was not so planned and we were obliged to have holes cut in the pipe (part in an iron pipe) to attempt to clean out the obstruction. Use iron pipe all the way to the street. It costs more than tile, but it is far more serviceable. Roots will grow into the joints of tile pipe, also tile is not as solid, and if a pipe line sinks somewhat it is very likely to cause a stoppage. It is better to invest a little money in the start to save a great deal later on. A stoppage in the sewer connection is not only very expensive to repair, but it also causes great inconvenience to the occupants of the house. Where your waste pipe or pipes pass through the cellar wall, mark a cross on the outside wall with a chisel. This shows the repair man exactly where the pipe passes out without stopping to measure. It is time that costs in all repair work, the material in the average case being necessary matter. Much of this information applies if one uses a cesspool instead of a street sewer connection.

If you plan a house with part of the second story covering the piazza (and many such houses are built these days) be sure that such a projection is properly supported. Usually the piazza columns support part of this weight, but see that the brick piers upon which these columns rest are substantial enough to sustain the weight without settling. If they are not strong enough it will necessitate a large expenditure for repairs, not only to the piers but also to cracked ceilings and side walls in the rooms above. It is a very different matter to support a portion of the house itself from simply a piazza roof.

Too often, however, this fact is lost sight of.

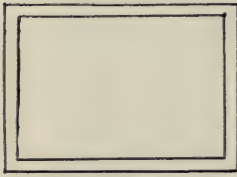
Outside gutters were planned for. They have decided advantages over the "inside" or "trough" gutters. In case of repairs no slate or shingles from the roofs have to be removed and replaced, therefore no carpenter or slater need be employed and much expense is thereby saved. With the outside type of gutter in case a leak develops it may be discovered at once. In the inside type of a gutter a leak will often allow water to pass to the wood, causing decay. Often this will happen unknown to the owner until serious damage has resulted. This will in many cases necessitate much carpenter work in addition to the tinman. Outside gutters are very easily painted, and deposits of leaves, etc., which so often stop up gutters and which injure them also, may be more easily removed from them, and in the winter if one's gutters "freeze up" it is much better that they should be of the outside type. They are inexpensive and very serviceable.

The Cellar

If you use a hot air heater, have your heating contractor make a "hood" to cover the outside of the cold air box. This will largely help to prevent "cold air coming through the registers," which every user of a hot air furnace knows is liable to happen if some precaution is not taken. The "arrows" in the drawing show how the air is drawn upwards through the bottom of the hood. Make it of galvanized iron and keep it well painted. (See drawing.)

We decided not to plaster our cellar ceiling. There are a number of reasons why this seems advisable in the average house. We had good, sound flooring laid on our first floor, and our cellar was nicely heated from the heat the furnace gave out. This, of course, helped to keep the first story rooms warm. We specified "fire boards" at the sides of the cellar,

so even if we did not have the ceiling plastered, protection was given from a fire starting in the cellar spreading to the roof through the walls of the house. A plastered ceiling will not allow the first story floors to be as warm as an unplastered ceiling will. I mention this because it is very important to have the first story rooms as warm as possible.



Cold Air Box.
Side View.

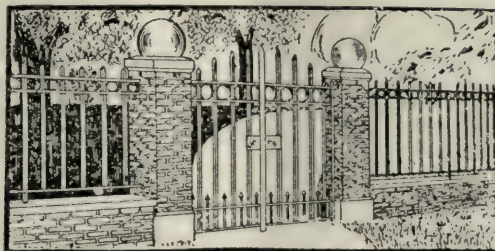


Hood.
End View.

We well know the difficulty of bringing up and down the average cellar stairs such garden implements as the lawn mower, garden hose, rakes, spades, forks, etc., and so at the rear of the house a "door" about the size of an average-sized cellar window was provided in place of a cellar window. Flush with its lower edge a platform was constructed of rough, cheap boards and lumber in the cellar, large enough to allow these tools to be placed there from outside. The amount of comfort one will obtain from not being obliged to drag these tools up and down the cellar stairs is considerable in a single season's time. A small lock secured it safely. How pleasant it was af-

ter mowing the lawn on a hot summer afternoon to simply roll the mower from the yard directly to its place with no door to open or close or no stairs to bother one! I know of some houses planned with the stairs from the kitchen to the second story placed so as to allow of even a larger opening for a compartment for these tools, and also for the children's bicycles as well. The rear stairs can usually be planned to allow this.

We planned our house to set upon the lot so we could have an automobile driveway from the street on one side. No home in these days is complete without such a driveway. The present owner may not wish an automobile, but if the house is ever to be sold, the purchaser may, and automobiles are now sold so reasonably that many people may have and do have them. Much expense can be saved if the automobile is kept in the back of the lot. A driveway will also allow coal to be put in directly from the wagon at a saving on each ton, so in addition to its being used for an automobile it can be used for this purpose. Look up your insurance laws when planning for an automobile house. Some towns or cities also insist upon its being so many feet distant from the house, etc. A driveway can be made very simply and will not cost a great deal, and as I just mentioned will prove a money saver each year on coal. Put your cellar coal windows on the driveway side.



Brick Fireplaces and Chimneys

"Sir, he made a chimney in my father's house, and the brick are alive at this day to testify to it."—Shakespeare.

PERHAPS there is no fireplace so full of memories as the fireplace of brick. From the fireplaces of our ancestors—great caverns, taking six-foot logs, with room for six people inside the jambs—down to the trim little openings for grates of our own day, brick has been the favored material.

The distinguished fireplace here illustrated must indeed have been modeled from some ancient baronial hall, and no other material could have sustained the feeling of dignity and richness of the architectural treatment of this most unique and artistic room. The high, vaulted ceiling, with its massive timbers,

the rich carving of the staircase, the fine, heraldic decoration of the chimney breast—all are in one harmonious keeping with the central feature—the fireplace, which, with its fittings and accessories, attracts instant admiration. To the most of us, however, the modest chimney corner of home offers a more practical interest. Two illustrations are shown of this type; one a simple colonial design of red brick laid in white mortar to suit the pretty cottage interior, one with a subtle suggestion of old-fashioned comfort in its recessed sides. It is simplicity itself, yet the inglenook suggestion, the square crossbeam at top, the mass of brick, give it undeniable character and charm.

The beauty of this design will appeal to the builder whose artistic perception finds satisfaction in long, graceful lines and simplicity of detail. Where the architecture of the room does not admit of a bookcase treatment, a special design will be furnished which carries the brickwork back to the wall and returns the mantel shelf. This will prove just as effective as the design treatment and will give the builder an effect in brickwork that cannot fail to please his most exacting taste without carrying a prohibitive cost. Brick of rough texture are preferable to smooth brick in this design, as the outlines, being severe, require the softening effect of the matt brick.

This fireplace comes in both rough and smooth effects, and in gray, gray-brown and red (shading to olive), the hearth being of smooth brick in a shade slightly darker than that used in the mantel.

If gray brick, either rough or smooth,



Colonial Design in Cottage Fireplace of Red Brick with wide Brick Hearth.

are used, the same brick should be used for the back, sides and bed of the firebox as for the face and sides of the mantel. Where reds, buffs or browns are used,

work and especially adapted to Mission or bungalow style, is shown in illustration number three.

Such a mantel when set up is seven



NO OTHER MATERIAL COULD HAVE SUSTAINED THE FEELING OF DIGNITY AND RICHNESS OF THE ARCHITECTURAL TREATMENT.

the highest grade of firebrick are used for fireplaces, for the back, sides and bed of the firebox.

An effective design in brick suitable for rooms treated with dark oak wood-

feet high and six feet wide, with an opening 3 feet 4 inches wide and 2 feet 6 inches high. In one of the smooth finished red bricks it would cost about a hundred dollars, ready to put in place, including the



AN EFFECTIVE DESIGN IN BRICK ESPECIALLY SUITABLE FOR ROOMS IN MISSION OR BUNGALOW STYLE.



AN ATTRACTIVE DESIGN IN ROMAN BRICK WITH AN ADDED TOUCH OF INLAID ENGLISH LUSTRE TILES.



THE INGLENOOK SUGGESTION, THE SQUARE CROSS-BEAM AT TOP, THE MASS OF BRICK, GIVE IT UNDENIABLE CHARACTER AND CHARM.

lining brick, hood chains, wrought iron fender, ash trap and angle bar. The cost in brick of fancy coloring would be somewhat more.

On the same page is shown an attractive design for a fireplace of Roman brick, with an added touch of inlaid English Lustre tiles. A raised hearth of the same brick is a feature of this fireplace. The shelf may follow the line of the bookcases if preferred, or the fireplace may be installed without bookcases. As illustrated, this mantel is six feet wide and four feet six inches high. The cost would be about \$75.00, including lining brick and tile inlaid, damper, ash trap, angle bar and mortar color.

EDITOR'S NOTE—We are indebted to the Colonial Fireplace Co. for some of the illustrations used in this article.



Subtle Suggestion of Old-Fashioned Comfort.



Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

—John Evelyn, 17th Century.

Planting Out Shrubbery

By Harry Franklin Baker



AN article on this subject seems timely because a considerable number of shrubs and perennials can be set out to equally good advantage at this season as in the spring, through the months of October and November.

In choosing shrubs for planting about the house one must keep in mind the size to which they will eventually grow, whether they require a considerable quantity of sunlight, or only a small amount. As most shrubs are in bloom for only a short time the blossoms are not of so much importance as the foliage—its color, character, and the general habit of the shrub.

Plant a considerable number of shrubs of the same variety together. This gives a much more pleasing and natural effect than a group consisting of one specimen each of several different varieties.



Brick Sun-Parlor with Flowers in Front of Shrubs.

For planting about the foundation of a house, the spiraeas are very useful, especially the *Spiraea Van Houttei*. The Rugosa Rose and barberries are also desirable for this purpose. Then there are the Hydrangeas, Diervillas, Deutzias and Forsythias. For the north side, or in shade, the Ribes is very useful, as are the Viburnums, which grow some what higher and are of a less spreading habit. Among the more familiar Viburnums are

For the taller growing shrubs there are a large number to select from. Some of the best known shrubs used for this purpose are the Lilaçs, Syringas, Aralia and cut-leaf Elders.

Flowers may often be used with the shrubbery about the house, but it is better to use too few than too many. In one of the illustrations it will be seen that flowers have been planted in front of the shrubbery surrounding the sun parlor.



FLOWERS SURROUNDING PORCH.

the Snowball and High Bush Cranberry. Two other most excellent varieties are the *Viburnum Ventatum* and *Viburnum Lantana*.

As a border to the shrubbery in shady locations or in place of them where there is not much room, a few ferns, some funkias, the Cardinal flower, *Arabis Alpina*, a small white-flowering spring plant and forget-me-nots will be found useful.

Where the winters are not too severe, the dwarf evergreens furnish most excellent material for grouping around the house. Rhododendrons, where hardy, may also be used with the conifers.

As this is where the family spend a considerable portion of their leisure, they are able to enjoy the fragrance of the flowers as well as their beauty. Also the flowers suggest pleasure and help make this part of the house more inviting.

In the second illustration the flowers have been used in front of the shrubbery surrounding the porch at the main entrance of the dwelling. As the house is placed well back from the street the flowers give a pleasant greeting to those who call.

The lawn should be left open and not spotted here and there with shrubs and



DIGNITY GIVEN BY OPEN LAWN.

flower beds. Restrict the planting to the boundaries of the property, or bordering the drive and walks.

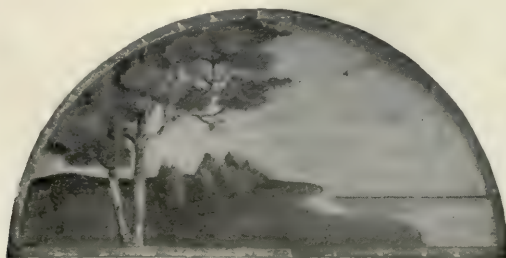
When planning the border planting consider the object it is desired to accomplish. If for a screen, tall quick-growing shrubs and trees must be used, but when it is desired to simply mark the boundary of the property or divide it from the street, choose material that will not grow to such a height that it will interfere with the view.

The third picture shows the use of trees in making a frame for the house—also note how the trees in the distance form a background. The expanse of lawn in front of the house lends an air of dignity and repose to the home that would be entirely destroyed had the lawn been decorated with flower beds and shrubs scattered here and there. Do not buy nursery stock—simply because it looks or is described as very beautiful—and then go home and look for a place to

plant it. Always have a definite purpose to accomplish.

Planting of shrubbery along the boundaries of the property accomplishes three definite results, viz.: Screening from view the public highway, which is just the other side, and over which there are many automobiles continually passing; it provides privacy for the home grounds. It also prevents the dust from being carried into the house. In the second place it furnishes an appropriate setting for the lawn and adds very materially to its attractive appearance. Finally it provides a background and proper setting for many perennial flowers, which may be effectively set in front of the shrubs.

You will notice I have said nothing about the blossoms of the shrubs. When in bloom they are most beautiful, but you can see there were other reasons for planting shrubbery in this particular place of more importance than the blossoms of the shrubs themselves.



Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 451 JOHN HENRY NEWSON, Cleveland, Ohio

B 452 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 453 KEITH'S ARCHITECTURAL CO., Minneapolis

Design No.

B 454 GEO. F. BLOUNT and JOHN M. GRAY, Boston

B 455 A. C. CLAUSEN, Minneapolis, Minn.

B 456 THE BUNGALOWCRAFT CO., Los Angeles

Design B-451.



HIS house is designed on simple lines and relies entirely upon the location and size of openings and combination of materials for its quaint interest. The brick used upon the exterior from the grade line to the sills of the second floor windows is a rough face brick of various shades and colors and the plaster on the second floor and in the gables is a light cream in color and is applied on hollow tile. The open terrace across the front allows for ample light into the living room and the circular bay presents a very charming view from the exterior; inside is a beautiful vista in looking through from the dining room towards the front of the house.

The house is entered by means of a covered porch at the doorway, through a vestibule into a stair hall, with the 35-foot living room across the entire front. Directly opposite is the dining room, while a fireplace with seats, forming an ingle-nook, occupies one end of the room.

The second floor is reached both from the front stair hall and from the kitchen. The cellar is accessible from the kitchen and also from the outside cellarway at the rear of the house. On the first floor is also a den or library, off the living room, with glass doors in the opening.

The second floor has three bedrooms, each with ample closets, and a sewing room which opens on to a sleeping porch on the rear. The bathroom, which

is over the kitchen, is very large and has in it a towel closet, a feature which is very convenient.

Estimated to cost, as described under ordinary building conditions, about \$7,000.

Design B-452.

If you want to build a good house, permanent, warm and substantial, brick is still the best method of construction. Where loans of money are required on residence property, they can always be obtained better on a substantial brick house; the difference in cost is not great and it may also be added that the benefit of enhanced value of the property is not generally appreciated.

In the case of a house the size of the one shown in this design, which is 30 feet in width by 40 feet in depth, the difference between a frame exterior and brick walls as hereafter described would not exceed \$500. In this case the walls are 12 inches thick, built with hollow brick for the inside course and a variegated oriental brick for the exterior face, with a common brick for the middle or filler course; the brick are laid in cement and the outside joists left open and deeply sunk. The sill courses, the cap to the piazza wall, also the steps, are built of hard vitrified brick, set on edge in cement. The foundation wall is 12 inches thick, built of concrete and carried to the grade line, the brick starting from this point, using a dark vitrified sewer brick up to the first sill course and from this

point to the top of the wall an oriental brick. It is estimated to build this house, exclusive of heating and plumbing, for \$4,300. The roof is low pitched and with wide, projecting eaves brought down close over the second story windows.

This is a plain, rectangular house, suited to the ordinary city lot, with the narrow end to the street and a wide 10-foot piazza across the front, constructed with heavy brick piers, carried to the cornice, and intermediate columns of wood.

The vestibule entrance at the right opens into a large living room across the full front, with wide fireplace in the center, the stairs and staircase leading up to the second story from the right side. The dining room opens from the rear of the living room. The kitchen, pantry and culinary department has had special study, and is arranged on the "Dutch kitchen" order, with wall cupboards, dumb waiter, clothes chute, etc. In the rear left-hand angle is an open, screened piazza, under the main roof, and above it a sleeping porch, connecting with the chambers. The second story has four good chambers and large bathroom, ample closets, and stairs to attic, which is left unfinished for storage purposes. The house is finished in hardwood with hardwood floors and Mission stain.

Design B-453.

A brick house on broad, low lines, is a very satisfactory house to build. The broad steps, with buttresses and brick pedestals supporting flower urns at either side, give a very imposing entrance. A stucco finish is applied to the upper portion of the front. The roof is of tile. The hall has a beamed ceiling, as have also the living room and dining room. An out-door dining porch or breakfast room is an interesting feature of this design. It is connected through wide openings with both the living room and dining

room proper and has also an entrance from the spacious veranda. Convenient for ordinary use. The arrangement affords a fine opportunity for a promenade in case of entertainments and for many telling decorative effects. The kitchen portion in natural birch is very complete in its appointments with two pantries, a large refrigerator, a servants' dining room and rear stair. The main rooms are of oak for finish and floors and the finish of halls is continuous on both floors. On the second floor are three large chambers, each with a fireplace. In addition, there are three bathrooms, dressing rooms, a sewing room and two servants' rooms, with numerous closets. The front chambers are in white enamel and the servants' rooms in birch with birch floors throughout. The attic is not high, but rooms of very fair size might be obtained, storage space remaining. In the basement is the laundry, hot water heating plant, storage space, etc.

Estimated cost, \$14,000. Size, 55 feet 6 inches by 66 feet 6 inches, as marked on plans; note projections additional for porches, etc.; basement, 8 feet high; first story, 10 feet 9 inches; second story, 9 feet 9 inches.

Design B-454.

A Natco hollow tile house, another of the brick builder competition houses, to cost \$6,000. The exterior tile walls being covered with cement stained which can be either rough cast or smooth. Shingles on the roof. The foundation walls to grade are of concrete. There is a full basement, a hot water heating plant and laundry being included in the estimate.

The rooms are good size and all well arranged. The living room has a built-in fireplace and window seat. There is also a built-in bay in the dining room, which gives an abundance of light.

There is a china space between kitchen

*John Henry Newson, Architect.*

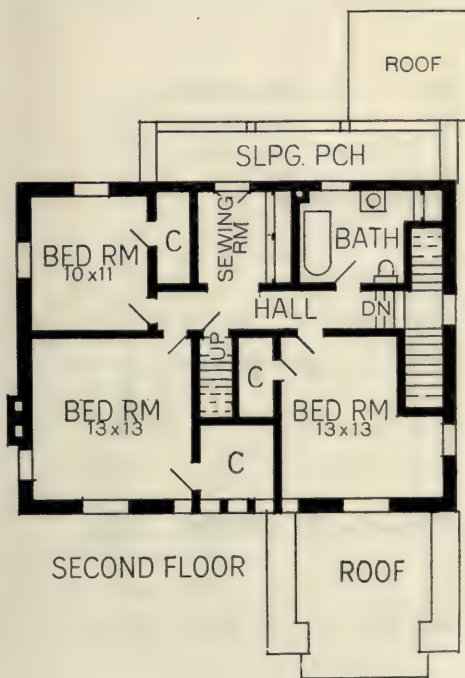
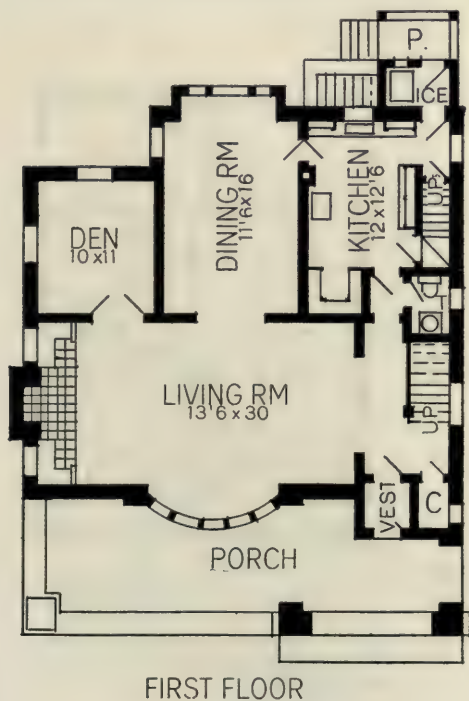
DESIGN B 451

A Brick and Cement House

and dining room, besides a pantry off the kitchen.

On the second floor are three chambers, bath and good closet space.

The floors throughout are in hardwood with hardwood finish in the principal rooms downstairs. Kitchen in pine; second floor finished in birch.





Chas. S. Sedgwick, Architect.

DESIGN B 452

A Plain Substantial Brick House

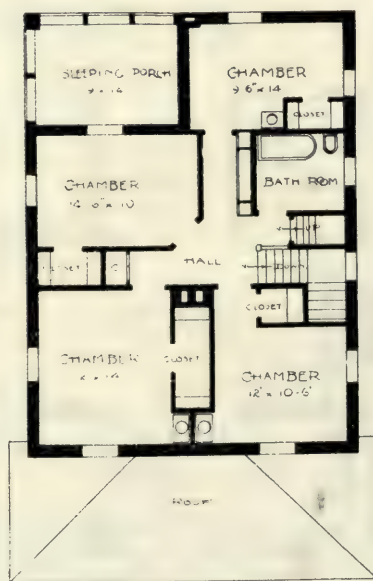
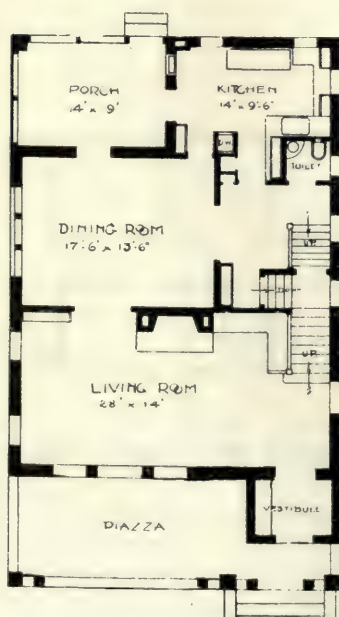
The flower boxes and pergola roof over the piazza add attractiveness to the exterior.

Design B-455.

This design by the Bungalowcraft Co.

is of frame with brick porch, piers and chimneys.

The exterior is very compact. Living room has open fireplace, bookcase is under the pedestal between the living





Keith's Architectural Co.

DESIGN B 453

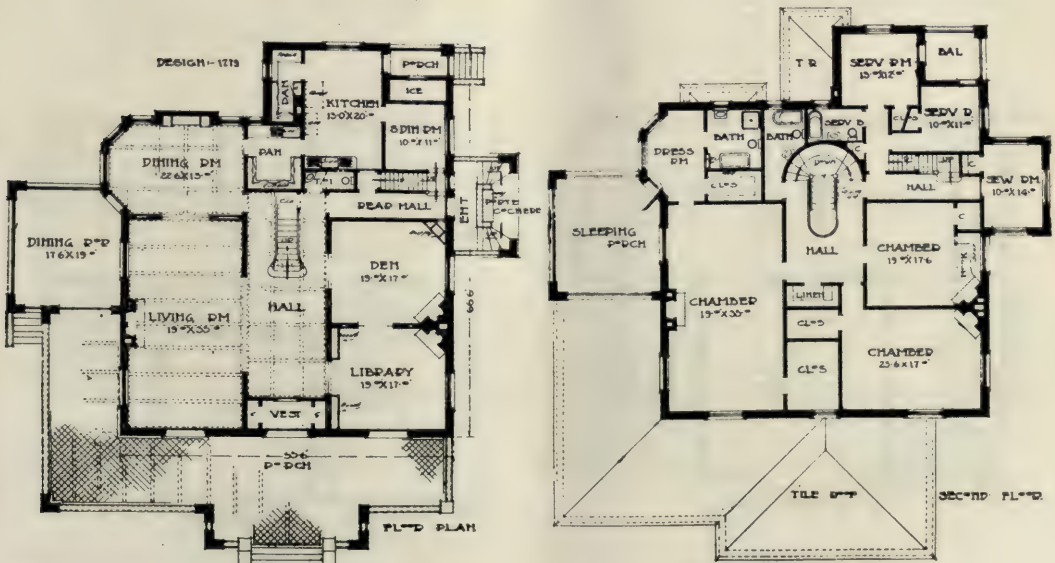
A Brick House on Low Broad Lines

and dining room. Dining room has built-in buffet and beam ceiling. The kitchen is equipped with cupboards. Two bedrooms, bath and extra toilet, coat and linen closets complete the arrangement. Finished in hardwood with pine for kitchen and chambers; hardwood floors throughout. It is estimated that this

house can be built complete as described for \$1,800.

Design B-455.

A brick veneer design with shingle roof. In the library is an open fireplace with built-in book-cases. Dining room has built-in sideboard with sliding doors in the rear, opening to a solarium. This





Courtesy Nat'l Fireproofing Co.

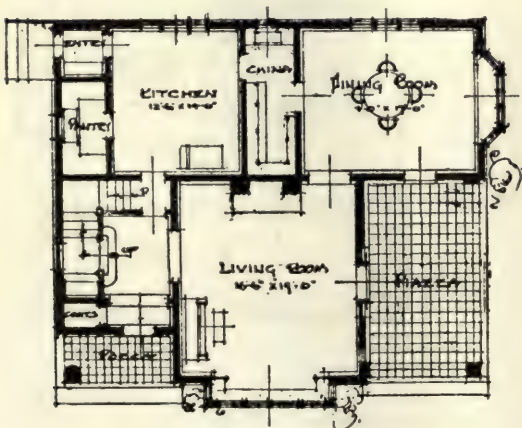
Geo. F. Blount and John M. Gray, Architects.

DESIGN B 454

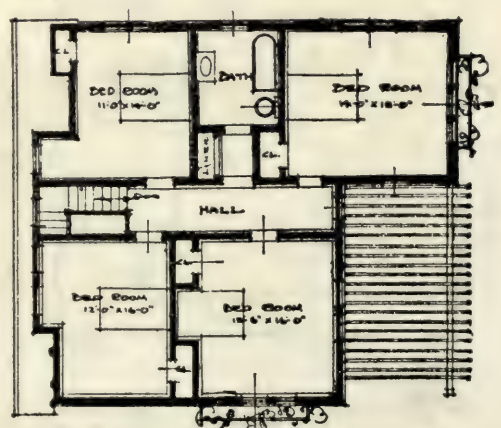
A Good Design in Natco Hollow Tile

could also be used as a breakfast room or porch. The kitchen, pantry and entry accommodations are very complete, as well as the arrangement of the stairway. The second floor has four good chambers and unusually large closets, bath

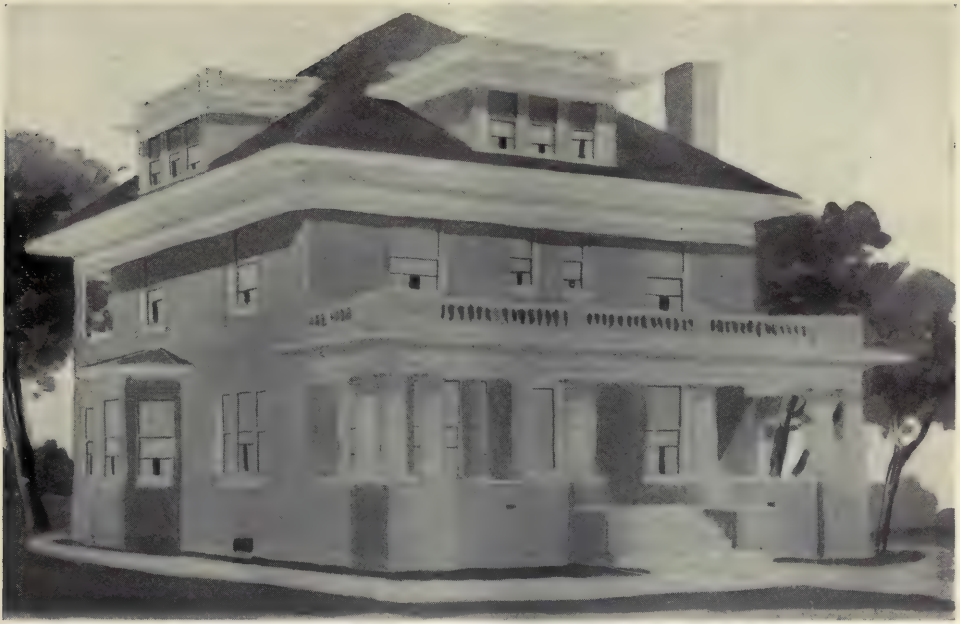
and a sleeping porch over the solarium. Three of the chambers have a separate lavatory besides the toilet on the first floor. There is a large linen closet off hall, and clothes chute leading to laundry in the basement. Hot water heating



FIRST FLOOR PLAN



SECOND FLOOR PLAN



Arthur C. Clausen, Architect.

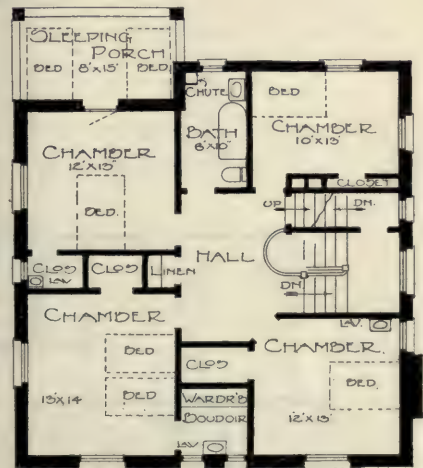
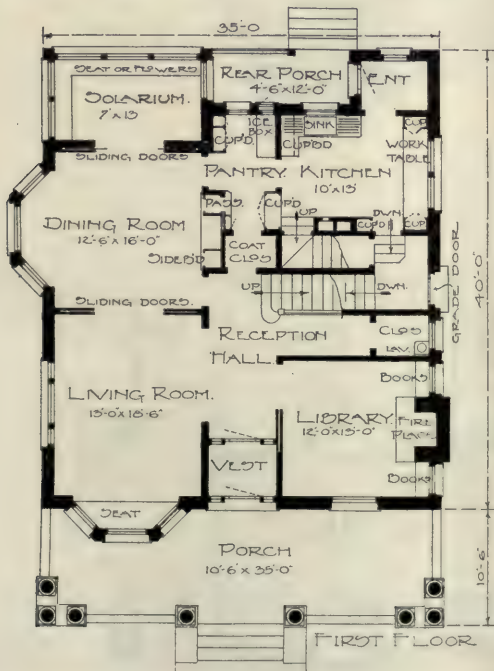
DESIGN B 455

A Good Brick Design Built in Nebraska

plant is used; good fuel and storage room.

Height of ceiling: Basement, 7 feet 6 inches; first story, 10 feet; second

story 8 feet 6 inches, with space in the attic for several rooms or a good sized ball or billiard room might be finished



DESIGN NO. 670
ARTHUR C. CLAUSEN, ARCHT.
MINNEAPOLIS, MINN.



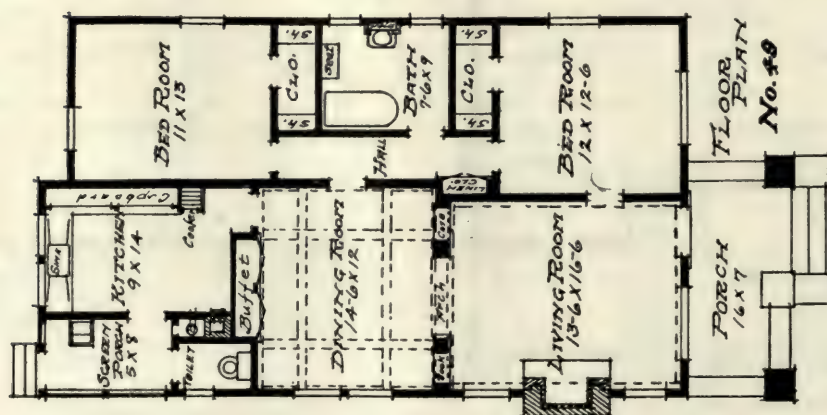
The Bungalowcraft Co., Architects.

DESIGN B 456

A Frame Bungalow with Brick Chimney and Porch Piers

Hardwood floors throughout with oak finish in the principal rooms downstairs, and birch for the balance.

Estimated cost, complete, including heating and plumbing, \$8,000.



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Kashmir Rugs.

THE Oriental Kashmir rug is not to be confounded with a domestic rug bearing that name, very cheap and not free from suspicion of cotton. The real thing is a rug with a repped surface, not very much heavier than the Kis Kelims which are used so much for table covers and couch covers. It usually has a border and the center is filled in with an irregular all-over pattern. I have never seen one which did not contain more or less blue, sometimes in combination with yellow, sometimes with crimson or rose red. They are not rugs that appeal to the general taste, and one has to hunt for them, but they repay the search in durability and charm. Besides, they are comparatively inexpensive, costing about the same as a French Wilton. The latter, by the way, if one can be found in a distinctively Oriental pattern and coloring, is a very satisfactory substitute for the Persian or Turkish web.

East Indian Druggets.

Where a neutral tinted floor covering is desirable, the East Indian druggets are desirable. They are very thick, reversible, and woven from a heavy, whity-brown wool, with a geometrical pattern in green, brown or black. In some the pattern is a mere outline of intersecting hexagons; in others is a set figure repeated at regular intervals. The average cost of these druggets is \$3 a square yard, and they may be had in sizes as large as 12x18 feet.

White Dining Room Furniture.

There is quite a fancy at present for dining room furniture in white enamel.

Some of the sets shown are perfectly plain, except for a little carving; others have a tiny line of blue, and still others are decorated with more or less elaboration in the classical style of the Brothers Adam. Like all new things, these are very expensive, but they offer a suggestion for the improvement of old furniture objectionable in color or finish. An old golden oak or natural cherry set, with the varnish removed, can be sand-papered, given two coats of the best white paint, put on very thin, and two others of enamel, and present a very fine appearance, indeed. The pine tree pattern in blue on white is an admirable wall paper for a white dining room, and the combination of white and blue is a good one for a small, sunny dining room. Such a treatment redeems the unhappy basement dining room, so often found in city houses in the east. White scrim short curtains can have an edge of blue and white cotton gimp, and the rug can be a rag one in plain dark blue, with a white warp and white stripes across the ends. The white furniture looks equally well with a green background or with a yellow and white paper, while a very gay effect, indeed, can be had with plain gray walls and curtains and chair seats of brightly flowered chintz.

Folding Tea Stands.

Allusion has already been made to the circular trays of woven Chinese cane. The larger sizes of these are now adapted to tea stands, provided with a simple folding frame of dark brown wood, and while primarily intended for piazza use, are quite at home indoors. The trays are about twenty-four inches in diameter. With a single tray the stand costs \$5.25;



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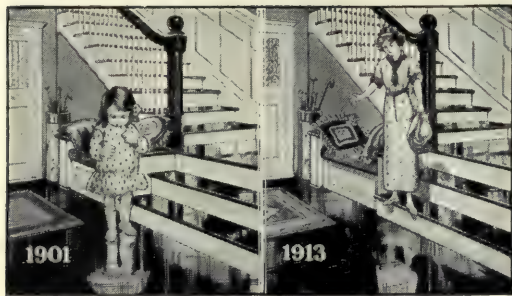
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DECORATION AND FURNISHING—Continued



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with two trays, one above the other, the price is \$7.50. The trays are detachable and can be used alone.

The Swing of the Pendulum.

It is astonishing to notice how, after years of dinner services in all the colors of the rainbow, the pendulum seems to have swung back to the blue and white so loved by our ancestors. Going through the stock of one big establishment, I was unable to see a single service of the slightest pretensions to good looks in any color but blue, except the always popular white and gold. The English potteries make services in great varieties of coloring, but they are expensive. The stoneware which most of us use is almost all in one of the shades of blue.

Twenty-one dollars and fifty cents buys a very good service of a hundred pieces, though one can get what is needed for a good deal less by choosing from the open stock, as few families require a service for twelve people. At this price there is a very good design, a modification of the familiar willow pattern, but showing more white, also the familiar Raleigh design in several shades of blue. For \$1 more one can get the Ruskin pattern, with a basket-patterned edge and floral centers, also the English copy of the onion-patterned Meissen china. For \$20 is a very accurate copy of the Copenhagen ware, which appeals to people who like a service with very little color, and the English willow, beloved of artists, costs the same. If one is willing to pay as much as \$30 for a service, there is one with an elaborate floral design, Chinese in its motif, while at the other extreme is the Persian Pekin, at \$15, an English-service with a stenciled decoration of rather large flowers and leaves in dark blue on a cream ground.

Equipping a Four-Poster.

Why anyone who can have a pineapple bed should want a four-poster is difficult to understand, but many people really covet the latter, and, having achieved it, are confronted with the problem of draping it properly. Most of the four-posters are very wide, and it is necessary to have the springs made to order. The most sat-



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This high-grade **Come Packt** Modern Mission Settee. Elsewhere would cost \$32. It was shipped in finished sections. She put it together—saved \$14.05.

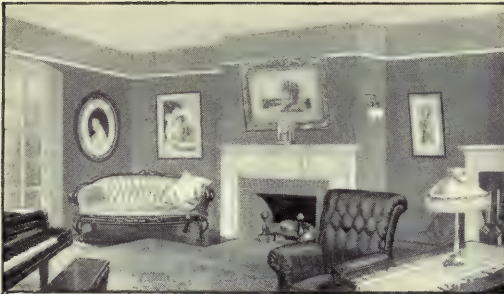
Come-Packt is strictly high-grade furniture—not "cheap" furniture. This settee, for instance, is of quarter-sawn fumed oak, with Imperial leather cushions. Height, 33 in.; length, 52 in.; depth, 25½ in.; legs 1½ in. square. **Come-Packt** price, \$17.95.

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isfactory one is a woven-wire one hung at the head and foot and exactly level with the frame of the bedstead. The mattress must also be made to order, and have the corners cut out to accommodate the posts.

Whatever the material chosen for the curtains, there must be a valance touching the floor, made in three sections and a not too deep frill around the top, also in sections. In old-fashioned houses this frill was attached to a strip of wood carried from post to post, but upholsterers substitute brass rods. There should be a curtain hanging from this rod to a point below the pillows at the head of the bed, which may be plain or full. If a material with much pattern is used it looks best plain and a picture can be hung against it. The side curtains are hung from the same brass rod as the upper valance, and are drawn back at either side of the headboard with cords and tassels. They should hang about a foot lower than the point at which they are tied back. The spread may either be tucked plainly under the mattress at the sides and foot, or may have its corners cut out and hang over the edges about a foot and be drawn up over the pillows. The pillows should be narrow and rather flat, and it is more in keeping to have them show.

Almost any white material, not too thin, can be used to drape a four-poster and should be edged with a narrow cotton fringe or gimp. If cretonne is used, a small pattern should be chosen, and if it is double-faced will need no lining.

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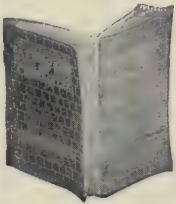
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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

A South American "Hacienda."

D. E. M. Am sending a drawing of the floor plan of the new home we are building. It is built in the style of the country, that is, of red brick and adobe, smooth plastered exterior, tinted deep cream, wood work and windows warm brown, chimneys red. It is, so far, a one-story building only, but we are expecting to put on a second story—if not just at present, it will be later. The floor plan of this second floor I have also enclosed. I would like to know what could be suggested to use in the interior to make it cosy and pleasant. As you will see, all rooms have been placed to profit of the view, which is great, the house being on top of a leno, which has been leveled off and is about eighty or more feet from the ground.

The second story we expect to make of cement over metal lath; would the interior's walls made of one of the wall-boards do just as well as plaster? Diningroom has seat in the recess and place for a little desk that I could use for my accounts; will it be proper there and should it be same finish as furniture or painted white? All windows are inward opening casements and I thought to put two wooden settles, painted white in the vestibule, which has arched opening onto porch and no outer door. What is your opinion of old rose paper for living-room, white paint and a fringe to reach just below the arches of the opening, etc.

The front porch, library, dining-room and all rooms on the northwest side of house have a view of the sea across the cotton and cane fields. The Patio, etc., have in the distance the ever-changing Lima. We have to use the labor of the place itself, and even the shops in Lima are not to be depended on for certain things, therefore I have to be satisfied

with simple decorations. At present all rooms have been plastered (mud) and whitewashed, but I wish paper on the walls; woodwork will probably all be white with exception, perhaps, of living-room, where the heavy ceiling beams I expect to stain a darker color. The fireplaces are red brick but the mason misunderstood and cemented them all over and whitewashed them. What can I do with them? All my furniture is cedar stained dull black. I have, in that color, several tables and a minister's desk, one double and two single wardrobes and two bookcases (marble tops, arched glass doors) that I think I can use at each side of library fireplace for my husband's collections of pottery, etc.

Ans. We are pleased to offer you suggestions for your very interesting home. It is interesting to us Northerners, who for climatic reasons must build so compactly, making every foot of space count, to examine plans so different, where one may revel in the joy of space for its own sake.

In this letter we can only touch upon the vital points, give you a general outline and suggest solutions for some of your problems. Were you nearer, we would advise you to avail yourself of our 50 cents a room service, which includes samples of wall papers and hangings, with fuller details, as well as purchase of any of these desired. We will keep in mind your limitations as to labor, etc., in our suggestions.

The possibilities for your beautiful interior with its beautiful outlook, are very great. First, we advise doing nothing whatever to the ceilings, which are excellent in the whitewash. Second, use ivory instead of pure white woodwork, and let the ceiling beams in livingroom be

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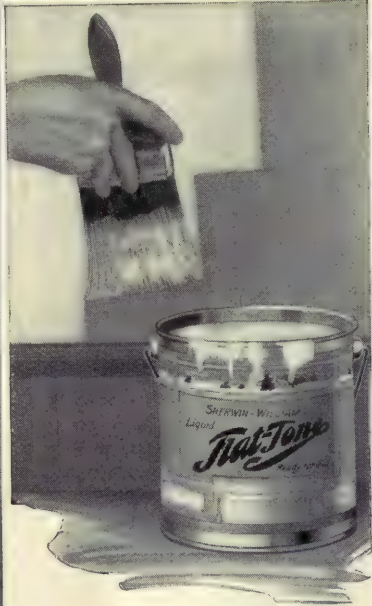
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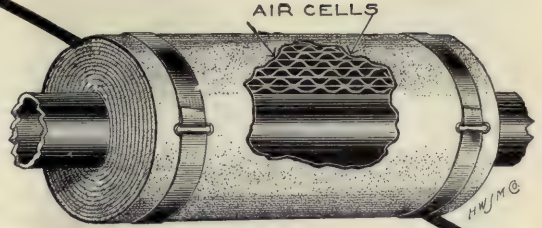
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ivory also. Do not use a frieze in this room, but a deep wood cornice, ivory like the rest. Put a landscape paper in soft misty greys with just hints of pinkish mauve, on the wall right up to the 10-inch cornice. Furnish the room as you say, with wicker and the black teak wood pieces. They will be admirable, cushioned in soft rose red, not old rose, but almost crimson. Let the blackwood pieces have plain material in this deep rose, and the wicker pieces cretonne with deep pink roses and rich foliage. You need imperatively a long wicker davenport, with seat and back cushioned in the same cretonne. Have hangings of the plain rose in the arched openings, setting the curtain pole just where the arch begins to spring and leaving the semi-circle space above, open. I am sure you will see at once how delightfully in keeping with its environment that living room will be.

You can do nothing with those mutilated fireplaces except tear them out and build them over. But in this living room, the white fireplace will not be so very bad. Your idea of the vestibule settles is good. With the ebony bookcases in library, we must use there carved table and any other heavy pieces. Old gold grass cloth would be ideal for the wall here, with old gold sun-fast hangings at the windows. If you do not tear out the fireplace, tint it the color of the wall.

The diningroom furniture with ivory woodwork can be either antique mahogany or ivory enamel. The latter with chair seats of apple green leather, a wall paper of gay birds and blossoms on a cream ground like that show in the May Keith's, page 342, and a silvery green rug, would be ideal. Your desk in the little nook should match the furniture. We are not familiar with come-pact furniture, but do not think it would be possible in mahogany. In the white enamel it might be possible. The open-slatted bedsteads are good, and we suggest this form of bed for the daughter's room in white, with dresser to match. Chair and stand could be wicker painted white or pink. A wall treatment like that described on page 341, May number, would be excellent. This room must be dainty, and you simply cannot put one of those black wardrobes

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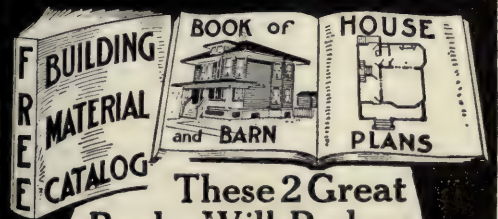
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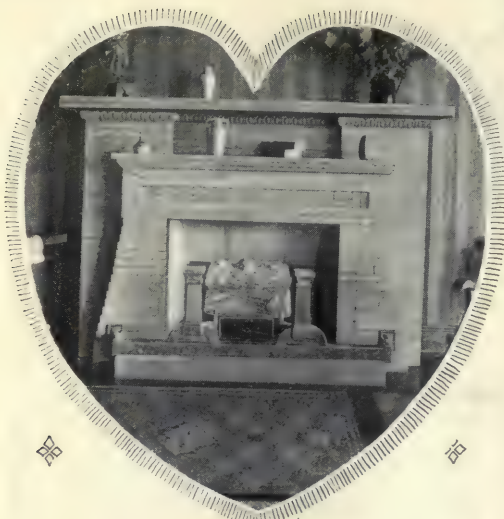
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in there. Why not run a partition of wallboard between this room and the play room, taking off three feet of space clear across and making two closets? Yes, the wallboard will answer perfectly in second story. Use thin strips of wood on ceilings and not beams.

With the twin beds and wardrobe in ebony, for the other bedroom we would use a paper having a sort of Japanese design of three branches in Chinese blue on a white ground, above plain blue dado, with Chinese blue and white linen at the windows.

Bungalow Furnishings.

J. M.—"Am very much interested in your magazine, and find you are helping others, so want to ask you to help me.

"I am having a one-story cypress shingle bungalow built. It faces east on street, is second house from south corner, vacant lot on north and in front. The body of the house is stained Cabot's weathered; roof, green; trimmings, cream white. Pillars and balustrade surrounding the porch and open terrace and all brick work, tapestry brick with granite caps, etc. All woodwork used in the interior is southern pine, stained fumed oak, with exception of bathroom, which is white enamel. I will use flat tone paints on walls. I had thought of finishing living room in rich tans and creams, or whatever you suggest. In fact, the mantel and tile is a light brown. Some of my furniture is golden oak and some brown wicker. Can I have golden oak refinished in fumed oak? If so please give me information."

Ans.—You have a very attractive bungalow, both as to exterior and interior. Your choice of stains for interior woodwork is good and we see nothing to change except that the woodwork in the guest's room and in the long, unlighted hall should certainly be painted light. The kitchen also, lighted only from the north, should be painted light. A four-foot wainscot could run around the lower part of the wall and be painted cigar brown. The wall above that and ceiling, a deep cream.

We should reverse your color scheme for living and dining rooms, putting the green tile in the south living room and

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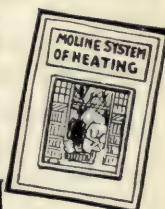
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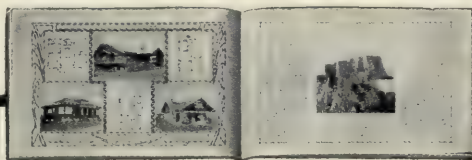
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ANSWERS TO QUESTIONS—Continued

the brown in dining room. This room, being northeast, should have the browns and creams, while the living room needs cooler tones. We should use a soft gray tint on living room wall, with ceiling lighter tone of same. Then have rug and furniture, hangings, etc., in green. Yes, the oak pieces can be refinished, but unless they are decidedly off we would not advise it. Your own room done in old blue would open very pleasingly from the greens of the living room. Dull blue tile will be the best mantel facing. Curtains ivory white voile, either hemstitch or a narrow, inch-wide ruffle; old blue rugs. Guest room in soft grey and pink, should have gray fireplace tile, and gray center to rug with pink border. There are less expensive bedroom rugs than body Brussels, both in blue and pink and gray. The body Brussels will wear better, however, and is a good choice for dining room. There is a Doone rug for bedroom, 6x9, for \$10, and a smaller size, 3x6, for \$5. Two of these, one beside the bed and one in front of dresser, would be sufficient in your climate. We can send you these, if you desire.

With your ten-foot walls a stencil frieze would be good. Several firms have beautiful patterns. Send for their booklets. Your wicker chairs in living room would be very pretty if cushioned in a cretonne in greens and blues. The door hangings could be Jasper or Aurora cloth at \$1.50 a yard, fifty inches wide, and the window draperies some of the green sun-fast materials, which come from seventy-five cents to one dollar a yard.



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Shall We Make Our Bread?



GOOD many considerations enter into the matter for the ordinary household. In the depths of the country one must make bread or go without, but in towns, of whatever size, baker's bread is attainable and is often very good indeed, while the model bakeries of the cities supply an article which is much better than the product of the average cook.

As regards expense, things are about equal, but when gas is the fuel used the cost of baking must be added to that of the dough, which makes the finished product perhaps a little more per loaf than the other. On the other hand the home made loaf is more substantial and nutritious, although seldom as thoroughly cooked as baker's bread.

The baker's loaf, if chosen judiciously, is more palatable, it is always the same, it is in smaller sized loaves which cut without waste, and as we have said already is admirably baked. Being kneaded by machinery, its texture is firm and it is never spongy, though it may be fluffy. Rigidly enforced inspection has raised the standard and it is free from the reproach of containing alum and sal-volatile which it once incurred. At its best it is not quite as good as the best home made bread, at its worst it is better than poor.

The advantage of making bread at home is that one can choose one's flour and get a sweeter loaf, at the sacrifice of its whiteness. The baker uses the flour which will absorb the most water and makes the whitest loaf, the extremely refined "cold blast" flour, from which most of the gluten has been extracted. This

is an important matter for families which eat large quantities of white bread. This deficiency of nutrition is supplied to some extent in the milk and cream loaves and in what is known as sandwich bread. People who like a great deal of salt are apt to find the baker's loaf insipid, and his graham and whole wheat bread is seldom sweet enough.

With brown bread and rye bread the advantage is on the side of the bakers, as these breads are much better when mixed by machinery. The soggy stickiness of most home made Boston brown bread is obviated by the baker's methods and his loaf is decidedly cheaper.

Eating Too Much Bread.

Aside from the saving of labor and the possible saving of expense, I am inclined to think that there is one gain in using baker's bread, even if it is not liked as well as home made. It is not desirable that the diet should contain too much bread and to supply the necessary carbohydrates with cereals in various forms, or with vegetables. The extreme prevalence of cancer among certain classes of Englishwomen has been traced by specialists to their abnormal consumption of white bread, and it is as well not to assume the risk, although it may be an uncertain one. At its best white bread is poor in phosphates which other cereal preparations supply.

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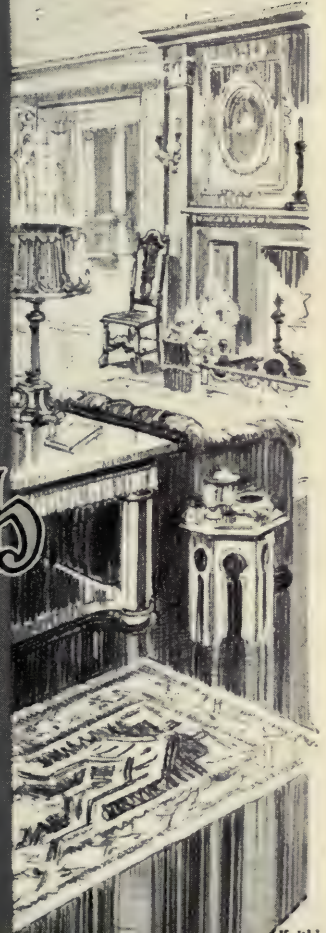
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brown bread which is leavened with soda and sour milk, the trouble is apt to be caused by the corn meal in the bread mixture. This can be omitted and the proportion of rye and Indian increased without perceptible change in the taste of the bread.

Reinforcing Skim Milk.

Here is a hint which may be of use to someone who is trying to economize on milk. Suppose you take two quarts of bottled milk a day. You will have sufficient cream for coffee in the top of the bottles, especially if you use a cream dipper in removing it, but the residue will be decidedly "skim." This remainder can be raised to the standard of ordinary fluid milk by the addition of evaporated milk, of which there are several reliable brands, and the mixture will not have the peculiar taste which makes evaporated milk so objectionable to many people. Better than evaporated milk, is unsweetened condensed milk, if you can get it. Either, diluted, is considerably cheaper than fluid milk.

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IF IT HASN'T THIS TRADE MARK—IT ISN'T A KEWANEE—

Private Water Supply Plants That Equal the Best City Service

You can get good service from almost any system—for a few months after it's put in. But getting that service steadily, surely and regularly—not for months but for years—is another thing. And it depends entirely on the kind of machinery you get.

The whole line of Kewanee Pumping Machinery has been designed under peculiar conditions. Our original specialty was the pneumatic tank, as opposed to the elevated tank, and we had no intention of manufacturing pumping machinery. We experimented with practically every line of pumps on the market and adopted and sold the best we could find.

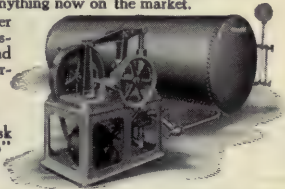
Being responsible for the satisfactory working of every Kewanee System, we received all complaints in regard to defects in pumping machinery and difficulties encountered in installing and operating it. As far as possible, we had manufacturers change designs and material to correct the faults in their pumps and we began making our own pumping machinery only when we found that old designs, old shop machinery,

and old methods prevented us from getting as good pumping machinery for our customers as we knew they were entitled to.

We candidly believe that when we started to make our own line of pumping machinery, we had a better knowledge of the strong and weak points of what the market afforded in this line and also of the difficulties in installing and operating which were encountered by all kinds of men in all kinds of places, than anyone else ever had.

We were not tied down by any old ideas, old designs or old shop equipment. We were not forced to hurry for we had an established business with customers who would take whatever machinery we could furnish with our complete Kewanee Systems. The market was already made for whatever we would manufacture and brand with the Kewanee name, but we laid down this rule and have followed it consistently through the development of the whole line of Kewanee Pumping Machinery and the special devices which go with it. "We will not manufacture anything unless we are sure that it is a distinct improvement on anything now on the market."

Ask your plumber about the Kewanee System. He will furnish and install it. Our engineering department is at your service for free consultation, specifications and estimates; ask for 64-page catalog "D".



Kewanee Water Supply Company

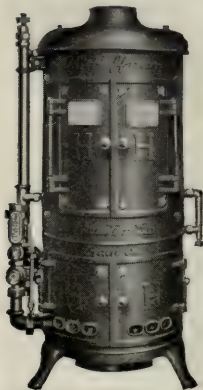
New York City

KEWANEE, ILLINOIS

Chicago

One of the Complete Kewanee Systems

WE WILL TAKE CARE OF YOUR HOT WATER NEEDS



Write and tell us how many hot-water faucets you have in your home and we will tell you what it will cost you to have hot water at your instant command any hour day or night.—We will also send you free an interesting book, which will fully explain the many advantages of the

HOFFMAN INSTANTANEOUS HOT WATER HEATERS

The HOFFMAN is lower, much lower in cost than any other—It costs less to produce hot water the HOFFMAN way than any other way.—The HOFFMAN never fails to produce pure, clean hot water the instant any hot water faucet in the house is turned on.—The HOFFMAN is positive in action and needs absolutely no attention. Don't purchase any hot water heater from any dealer, any plumber, any gas fitter, or any gas company, until you have sent for our free book.

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RIGHT TEMPERATURE IN THE HOME

Below Sixty While Asleep
Warm at Waking Time
Even All The Day

WITH THIS PERFECT DEVICE you can determine exactly the inside temperature regardless of outdoor conditions or variations—whether 20 below or 40 above. All adjustments are made instantly from the thermostat which has its place on the wall in the living room. Batteries, motor and connections located in the basement.

The "MINNEAPOLIS" HEAT REGULATOR With Time Attachment

Relieves one of many steps. Prevents all extremes of temperature and waste of fuel. Maintains an even, healthful temperature morning, noon and night. The "Minneapolis" is the "original" and "best" heat regulator—the standard for over 30 years. Lasts a lifetime.

Model No. 60 with Square Clock
Model No. 47 with Round Clock

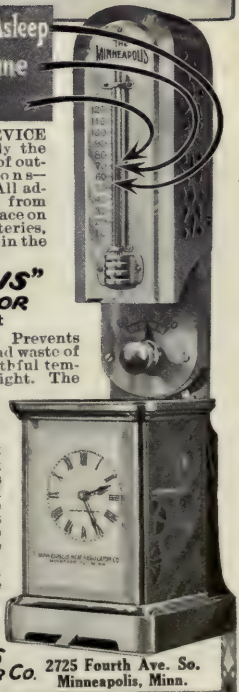
The clock attachment enables one to secure automatically and silently a resumption of the daytime temperature at any set hour. With Model No. 60 (same as illustration) time and change run 8 days with one winding.

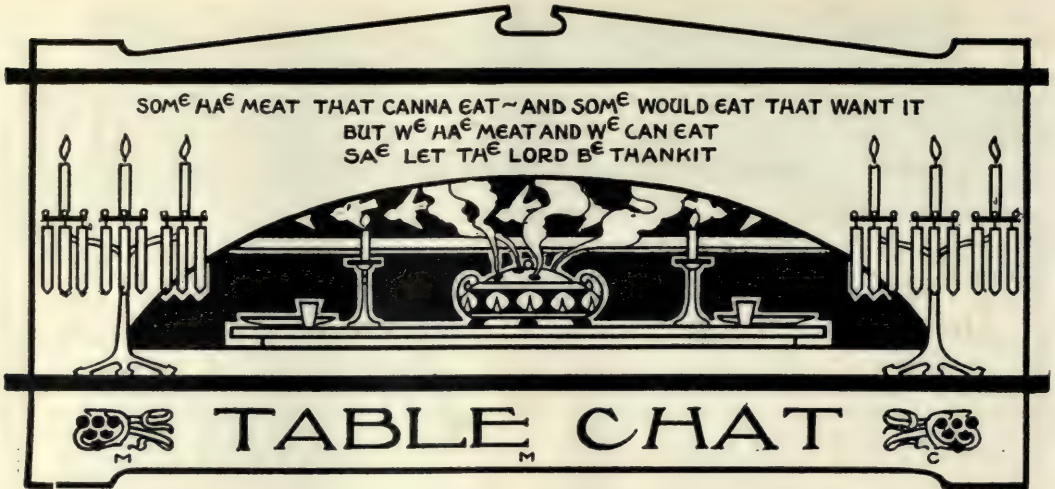
Used with any heating plant. Sold and installed by the heating trade everywhere under a positive guarantee of satisfaction. Write for booklet. Shows models, gives prices.



MINNEAPOLIS HEAT REGULATOR CO.

2725 Fourth Ave. So.
Minneapolis, Minn.





Home-Made Creams



ALMOST everyone has at some time invested in a freezer but many discard it after using a few times because it seems so much trouble, though making one's own cream is really a substantial saving. And even if this is not an object, many varieties not to be had anywhere except in the large cities, are at the command of the amateur.

There are two sorts of ice cream, Philadelphia and Neapolitan. The former is merely frozen, sweetened cream, flavored.

One-half the cream is scalded, sweetened and cooked five minutes. When it is cold the second half whipped stiff is added with the necessary salt and flavoring. In freezing the bulk of the cream remains exactly the same. Cream of this kind, while very delicate is not nearly as solid as the other and must be eaten immediately. Being made entirely from cream it is more expensive than the other.

Neapolitan cream is the name given to that which has a custard base, although the term Neapolitan is sometimes given



HALLOW'EEN CAKES.



MORGAN DOORS

Exclusive dignity combined with real beauty; and real beauty combined with stability of wood and construction, give to Morgan Doors their harmonious appeal in well-appointed dwellings.

Unique ideas for homes are shown appreciatively in our book "The Door Beautiful." Write for a copy.

Architects find descriptive details in "Sweets Index", pages 1004 and 1005.

MORGAN SASH & DOOR COMPANY, Dept. C-22, Chicago, U. S. A. **FACTORY:** Morgan Company, Oshkosh, Wis.

Distributed by Morgan Millwork Co., Baltimore, Md.

TABLE CHAT—Continued

to a single variety, the harlequin ice arranged in layers.

For a quart of cream you mix a pint of milk and a cup of cream and scald them in a double boiler. Beat the yolks of four eggs very light with a cup of sugar and pour the hot milk into the mixture, beating steadily all the time. Cook it in the double boiler until it thickens. When it is quite cold add a little salt and flavor with vanilla, using about a tablespoonful to a quart. Chill the mixture thoroughly before freezing.

many ways. The vanilla flavor is essential, whatever other one is used as it blends and accentuates all other flavors, with the possible exception of lemon.

After the cream is frozen it is much improved in flavor and texture by standing for several hours, and allowance should be made for this in timing the making. What are known as the demi-ices, mousses, granites, frozen pudding and the various parfaits are frozen without being beaten and do not require a freezer, merely two pails of different sizes, with



COFFEE CREAM AND BANANAS.

When eggs are high you can use two to a quart of ordinary milk which has been scalded. Beat the eggs very light, add a cup and a half of sugar and beat again. Thicken the scalded milk with a tablespoonful of corn starch, wet in cold milk and cook half an hour in the double boiler. Then put in the eggs and sugar and cook ten minutes, stirring all the time. Chill and before freezing add a pint of cream whipped very stiff, salt and vanilla. Flour may be substituted for the corn starch and arrowroot will be still more delicate.

These mixtures are the foundation of all sorts of ice cream and can be varied in

enough room for the ice and salt between them. In winter time this freezing can be successfully managed by burying the vessel containing the mixture to be frozen in a pile of snow, putting salt through the part which touches the pail.

Enough cream for two people can be made in a pound baking powder can buried in ice and salt. Instead of beating the cream by turning the crank of the freezer, you take the can out two or three times and shake it thoroughly. Almost any remnant of dessert, custard, rice pudding, cream tapioca, or even stewed fruit can be frozen in this way with very little trouble, while making ice cream for an

The Dining Room Floor.

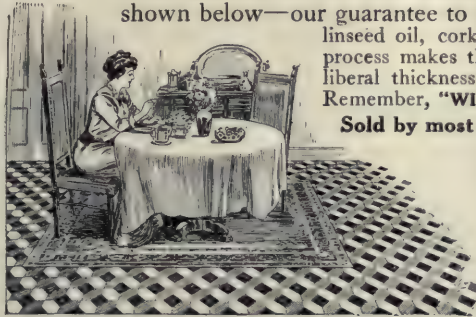
The question arises—"What is the best kind of a floor or floor covering for the dining room?" A parquet floor is noisy, slippery and requires frequent and expensive refinishing. Carpets are extremely unsanitary. But consider

WILD'S PARQUET INLAID LINOLEUM

"WILD'S for WEAR"

It looks just like wood parquetry—has all its dignity and richness—is noiseless and perfectly sanitary; never needs "doing over" as it can be kept fresh and new with soap and water; has a non-slippery surface; and wears for years as the patterns are *inlaid* (colors go through to the back). With a large central rug and smaller ones thrown about your problem is solved.

This beautiful and durable linoleum bears the "Wild's Linoleum" trade mark shown below—our guarantee to you of high quality and long wear. Only pure linseed oil, cork, etc., are used—no substitutes—our "straight line" process makes the Inlaid Linoleum very compact and by allowing a liberal thickness in the finished goods unusually long life is insured. Remember, "WILD'S for WEAR."



Sold by most furniture, house furnishing and department stores.

Send for folder "O" showing these wood patterns in colors, a small sample, and the names of dealers in your locality who carry this linoleum.

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If building or remodeling be sure and write us.

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from Experienced Users.

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Beaver Board gives equal satisfaction for the walls and ceilings of residences, and suits all climates, north and south, wet or dry.

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Read above letter, referring to the walls and ceilings of this bank.



TABLE CHAT—Continued

If you are planning a new home, or the refurnishing of an old home, be sure to learn all about

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Grass Furniture
TRADE MARK

before making final decision

Ask your dealer for CREX

New booklet No. 307, Artistic Home Furnishings, sent free on request.

Prairie Grass Furniture Co.
Sole Manufacturers
Glendale, Long Island, New York


invalid is achieved with the least possible trouble.

A Simple Chocolate Pudding.

Here is a simple and very decorative cold dessert. Stir together a pint of milk, two tablespoonsful of corn starch, two of cocoa, a little salt and sugar to taste. Cook it in a double boiler about twenty minutes, stirring it constantly until it thickens. After you have taken it from the fire flavor it with vanilla and pour it into the dish in which it is to be served, which you have wet in cold water. Decorate it with bits of uncooked fondant, into which you have pressed walnut meats.

Coffee and Bananas.

The flavors of coffee and banana combine very well. Line a glass dish with thin slices of sponge cake. Whip stiffly a pint of cream and add to it half a cup of strong coffee and two tablespoonsful of sugar. Pile it in the dish and put thinly sliced bananas around the edge. The ingredients should all be very cold and the whole thing done just before serving.



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"Silver Plate that Wears"



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Sold by leading dealers.

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consisting of *Electric Washing Machines; Ironing Machines; Ironing Boards; etc.*, especially adapted for use in the laundry room of *Residences, Apartment Buildings* and moderate sized *Hotels, Hospitals, Sanitariums* and similar Institutions. Can furnish individual machines or complete outfits. Our appliances are the best that can be had—there are none better.

Write for our complete and handsomely illustrated No. K 14 Catalog. Mailed free upon request. Send for it today.

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CHICAGO

Glass always pays—for it makes its own weather

It admits the sunlight and holds it to its work in spite of zero outside. It insures early and profitable crops. Even the old style single layer sash pay, but do not compare with

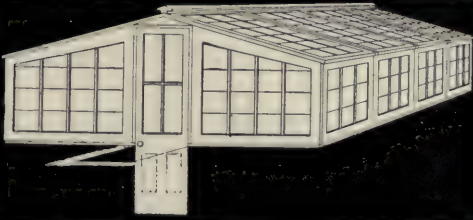


These are complete in themselves, eliminating mats and shutters, labor and all; keeping the plants growing by conserving the heat day and night; making crops early and doubling profits.

The Sunlight Double Glass Sash idea is carried into the Sunlight Greenhouse—a small and inexpensive structure. It is 11 ft. x 12 ft. in size and the roof and two sides are covered with the Sunlight Double Glass Sash. It is quickly and cheaply heated. The sash are readily removable and in the Spring may be used on cold-frames and hot-beds. The framework is made in sections, easily put together.

Write today for a copy of our free catalog, and for 4c we will send you a copy of Prof. Massey's booklet on how to make and use hot-beds and cold-frames.

Sunlight Double Glass Sash Co.
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You can paint, paper, tint or kalsomine the walls that are finished with

Roberds Ideal Wall Board

The edges fit tight and close leaving no cracks or uneven places. Panel strips are not necessary. Merely butt the edges of the wall board and cover them with our invisible joint binder and you have a perfect wall which you can decorate to suit your own taste.

Roberds Ideal Wall Board is easily applied, sanitary, clean, durable. It makes the house warmer in winter and cooler in summer and more attractive all the time. It costs only half as much as lath and plaster.

Write for booklet, sample, testimonials and name of our agent in your locality.

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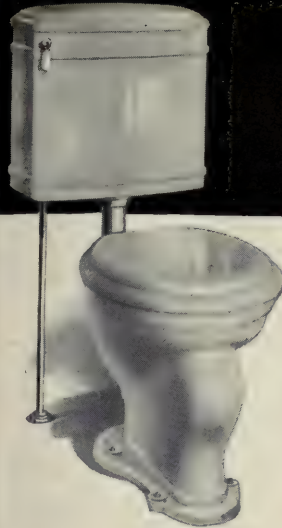


Plate 300-D.

This
Toilet Will
Never
Embarrass
You

Even though your house be small and your toilet room be close to your living rooms, you will never be embarrassed by the noisy flushing of the water closet, the rattling of valves and the whistling of the water as it flushes out the bowl if you have one of the Pfau Toilet Combinations or if you equip your present toilet combination with a

PFAU White-Copper TANK

This tank with its operating mechanism is so constructed that it works with very little noise,—so little, in fact, that it cannot be heard outside the toilet room when the door is closed. Yet it is very efficient, completely flushing out the largest bowl of whatever style or type and doing its work quickly as well as thoroughly.

The Pfau White-Copper tank is the most beautiful toilet tank ever built. It is entirely of metal, rust-proof, and practically indestructible. It is very small as compared with tanks of china or enameled iron, being in perfect proportion to the size of the toilet room. Finished in shimmering, snowy white or rich mahogany with seat to match. Priced lower than porcelain.

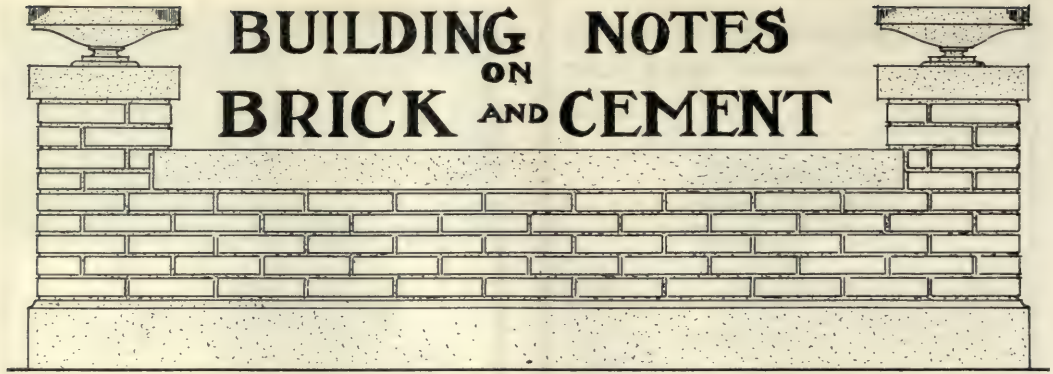
Ask your plumber to show you.

Write today for booklet.

THE PFAU MANUFACTURING CO.

Mentor and Huston Sts., Cincinnati, Ohio

Largest Manufacturers of Toilet Tanks and Seats in the World



Figuring Brick Work in Building Construction.

A. S. Atkinson in The Building Agent.

THE cost of brickwork must, of course, vary considerably in different parts of the country owing to the wage scale and the cost of bricks, sand, lime and labor.

In making such estimates the cost should be made first on the materials and then on the labor, including all incidental expenses. A rule that is adopted by engineers for brickwork is to figure on 14 bricks per square foot of 9-in. wall and 21 bricks per square foot of 13½-in. wall, making deductions for all openings. This means an allowance of 7 bricks per square foot for each half-brick thickness of wall.

If we accept this method of figuring we have 48 sq. ft. of 12½-in. wall for each thousand bricks, or practically 2 cu. yd. This is frequently taken as the standard unit of measurement. Masons, however, usually figure on 22½ bricks per square foot of 12-in. wall, which includes all openings and corners.

In former years manufacturers of bricks had a few standard sizes, and it was much simpler to apply the arbitrary rules for estimating by the thousand; but today the size and thickness of bricks varies considerably, and the tendency is to increase the number. The unit measurement must, therefore, show wide variation in different localities. The average size of bricks is generally placed at 8¼ to 8½ in. long, 4 in. wide and 2¼ to 2¾ in. thick. But there are plenty of bricks both larger and smaller than this size. Some in New York are used as small as 7½ x 3½ x 2 in., and as large as 9 x 4¼ x 2½

in. The larger size with joints will lay up 800 to the thousand in a wall of standard measurement, and the small size 1,100 and more to the thousand-brick measurement.

Variation in the Sizes of Brick.

Bricks vary in price as much as in size, and while \$6.50 to \$7 per thousand may be the average price at the yard they may in some instances cost \$8 to \$10 per thousand or seconds as low as \$6 per thousand. The quality of the bricks must be clearly specified before any figuring can be undertaken. The cost of getting the bricks delivered varies greatly, depending upon conditions. Usually in cities where brickyards are near, the manufacturers charge a uniform price for delivery. If shipped by train from the brickyards, the cost of freight, unloading and hauling must all be added to the cost of the materials. These charges may amount to several dollars per thousand in some localities. The condition of the streets and roads makes an important factor in the situation. For instance, while a team may haul 1,500 bricks as a load across good city streets, the same team could barely haul more than 500 bricks over rough dirt roads of the country. The labor cost should next be taken up. Labor is the one item that makes bricklaying so expensive in some parts of the country. The cost of materials is fairly constant throughout the country, but labor is not. This varies as greatly as the efficiency of the men themselves. High wages do not always mean high-grade efficient workmen.

Bricklayers are paid all the way from 50 to 75 cents and more per hour. Probably 60 cents is as near the average paid

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BEFORE deciding on any roofing, for any purpose, be sure to send for our free book. This book contains much information you should know.

—It tells you of what materials a good roofing should be made;

—It tells of the decorative qualities of certain roofings,

—It tells of the economy, efficiency, durability of roofing materials.

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Sal-Mo Shingles are being specified by architects, contractors and builders as the more durable and attractive of all roofing materials.

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When you once learn these facts, you will be better able to compare Sal-Mo Shingles with other roofings. You will know then why they take precedence over other materials where beauty, durability and economy are desired. Sal-Mo Shingles mark a step in advance of all roofing materials. They provide a roofing that

- is absolutely water-tight;
- never requires coating or painting;
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- keeps buildings cool in summer, warm in winter;
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This book tells of the superior value of Sal-Mo Shingles over other roofing materials, in a fair and impartial way. Book also contains full-page illustrations in colors—showing how many attractive and pleasing effects can be obtained from their use. Address Dept. D, city nearest you, when writing for book.

Sall Mountain Company

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BUILDING NOTES ON BRICK AND CEMENT—Continued

throughout the country as can be made. Hod carriers and masons' helpers, who keep the bricklayer supplied with mortar and building scaffolds, receive from 30 to 45 cents and more per hour. These rates vary so materially that one can never figure on a job in another town or state without knowing exactly beforehand the union scale of wages prevailing there. It is never safe to assume that the same wages are paid in any two places. Many a contractor has lost heavily on contracts simply through failure to ascertain in advance the exact scale of wages prevailing in certain towns both for masons, laborers, hod carriers and carpenters. Figured on wage scale basis, one might ask how much does labor cost per thousand bricks.

Cost of Labor per M Bricks.

The answer to this depends upon the ability and efficiency of the men and the amount of work the contractor can get from them in a day. While working on narrow piers and projections, the laying of 500 bricks by a man may be considered a good day's work, the average on a 9-in. wall may be at the rate of 1,100 to 1,400 in a nine-hour day. On 13-inch walls the average should run as high as 1,300 to 1,600 bricks, and on an 18-inch to 22-inch wall from 1,500 to 2,200 bricks in nine hours per man. On heavy foundations, where the work is the simplest, it is not uncommon for bricklayers to average 3,000 bricks a day and even 5,000 bricks

have been laid by bricklayers when rushed.

The cost for laying a cubic yard of bricks in a wall may then be figured out as follows:

Materials.

459 bricks at \$7.00 per M.....	\$2.84
Freight on bricks .....	.56
¼ cubic yard of sand .....	.11
Freight on sand .....	.06
0.22 bbl. of cement at \$2 per bbl ..	.44
1 bu. lime at 20 cents .....	.20

Total\$4.21

Labor for Cubic Yard of Wall.

Bricklayers	\$2.62
Laborers .....	.93
Carpenters .....	.39
Unloading materials .....	.58

Total labor\$4.52

Total materials 4.21

Labor and materials\$8.73

As 1,000 bricks of the average size when piled up solid without mortar makes practically 1.65 cubic yards, and the amount of mortar used for good joints increases this pile so that the thousand bricks when laid up in a wall equals about two cubic yards, it will be seen that by doubling the above estimate for each cubic yard of wall we have the cost per thousand bricks at \$17.46, which includes all materials and labor.



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Designed with space saving sanitary Wardrobe instead of dusty lost space closets.

Build Your Home the "New Way"

10% larger Bedrooms—50% larger wardrobe capacity and you can save from \$100 to \$300 in building a Home with "NEW WAY" Wardrobes built in flush instead of the old-fashioned, cob-webby, dusty closets.

A home planned and built with these new space saving, sanitary and convenient wardrobes will be more comfortable to live in and much easier to rent or sell than if built with the old-fashioned dusty closets. Send 50c now before you forget it for our "NEW WAY" Home Plan Book, which shows 22 designs for homes, ranging in price from \$1200. to \$12000. all of which are planned with these "NEW WAY" wardrobes.

JOHN THOMAS BATTS

Room 612 Architectural Dept., Grand Rapids, Mich.



Wardrobe in an Alcove Dressing Room—Garments extended.



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Expanded Metal Lath

—because the mesh of "KNO-BURN" makes the plaster **STICK**. Proof against the effects of moisture, dampness, mold and the ravages of time or decay—fire-resisting, durable and absolutely immune from dangers of discoloration or of cracking—"KNO-BURN" is the logical plaster base wherever plastering work is required.

"KNO-BURN" is worth many times its cost because, as a plaster-gripping base for the walls and ceilings of your home, it is *permanent*. Moreover, as a means of preserving the original smoothness and beauty of exterior and interior plaster work for all time, of reducing fire risks and increasing the value of your property—"KNO-BURN" is supreme in the metal lath field and every home-builder today wants to know all about it.

"KNO-BURN" Expanded Metal Lath is the strongest stucco or plaster foundation it is possible to produce. It absolutely prevents the cracks that come from a poor plaster base and makes crumbling of the wall coating impossible.

Write for Your Copy of the Booklet "Metal Lath for House Construction"

For the information of up-to-date home-builders we have published a special 24-page booklet "Metal Lath for House Construction." Its pages are replete with timely and helpful building "pointers" that you will welcome.

A post card request for Booklet No. 655 will bring this Mine of Specific Information to you by return mail. Simply address

North Western Expanded Metal Company

965 Old Colony Building, Chicago, U. S. A.



Many styles of grate and mantels to choose from

A Cheerful, Open-Grate Fire and a Ventilating Warm-Air Furnace

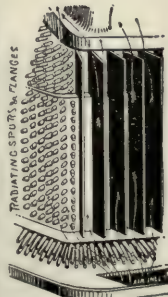
are combined to secure coziness, comfort, health and economy in

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Send for Free Catalog K of Ventilating Grates, mantels, andirons and all kinds of fireplace fixtures with explanations, illustrations, full information and prices; also reference to users in your region.

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Study this diagram and you will see at once the heating and ventilating principle which makes this grate superior to all others.



OUR BOOKLET ON Pergolas and Garden Accessories

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Send for Catalog G-27.

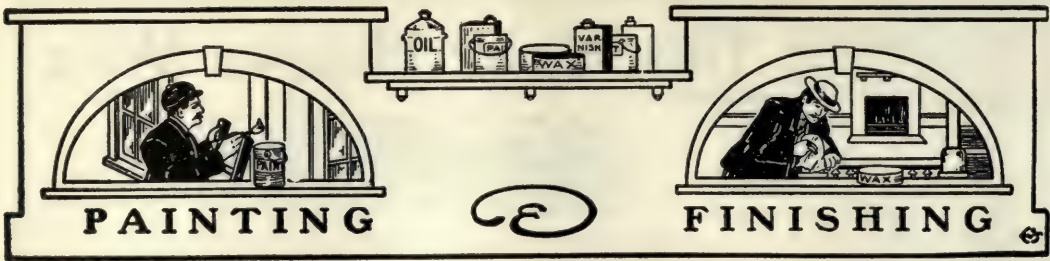
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By

A. Ashmun Kelly in the National Builder.



WING to the porous nature of concrete and cement work generally, it is found necessary to protect the exposed surface from the action of rain or dampness. Water filters easily through it, and this is the reason for works, constructed from such material, deteriorating in time. A variation exists in the permeable qualities of concrete or cement work, the determining factor in the case of concrete being mainly the density of the mixture; where considerable cement is added the porosity will not, of course, be as great as where less quantity is employed. Capillarity decreases with the process of time. It is well to remember these facts when about to treat such material with filler or paint.

Many substances have been tried in the effort to decrease the porosity of concrete, most of them incorporated with the mixture of sand, etc. Most of these experiments have not proven satisfactory. The purpose of these treatments is to make the substance impermeable to water. Some have proven quite satisfactory, the best resulting in the taking up of only 5 per cent. of the amount of moisture taken up by untreated blocks. In some instances it has been found that the addition of certain waterproofing substances has weakened the concrete, while in others it has not thus affected it, but has materially improved it.

Coming to the painting of concrete or cement surfaces, we may say that two purposes are served thereby, namely, the sealing of the pores of the material, and the enhancing of appearance of same. One of the troubles with cement work is the efflorescence, or exudation, of soluble salts from the action of moisture on the cement. This can be overcome only by

either filling the substance with some waterproofing liquid, or painting the surface with a proper paint or filler.

It has been found that certain pigments have a bad effect on cement. But any inert pigment, such as the earth colors, ochre, umber, sienna, Vandyke brown, etc., being inert, have no harmful influence in this case. Water-soluble dyes have not been found harmful; they are used when more brilliant coloring is desired. Grease will injure fresh cement, but not old cemented work.

Floors made of concrete and cemented soon become dusty, and sweeping the floor aggravates the evil. The only thing to do is to paint the floor. This ought to be done in the beginning, or before dust begins to show.

All cements contain more or less alkali, hence in order to prevent action of the alkali on any oil the paint may carry we must neutralize the said alkali. But an acid will injure the cement. Some substance capable of changing the alkali to insoluble salts has been tried, but it is found that to attempt to change the alkali thus, or to get rid of the alkali by neutralizing it, is not satisfactory. First, there should be applied a filler substance, something like a thinned varnish, which will penetrate and fix the alkali, and leave a good surface for ordinary oil paint. On a floor done this way there may be used the ordinary best floor paint. Before applying filler or paint let the surface be carefully brushed off, to remove every particle of dust or grit. But do not make the mistake of washing the surface first with water, for the moisture will sink in more or less and is hard to get out. Concrete requires a long time to dry out. And if a concrete floor is not perfectly dry before it is painted there will be some scaling off of the paint at some subsequent time.

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As with painting on wood, thin coats are to be preferred to heavy coats, and even more so in the case of concrete than with wood, for there is not as good a holding surface in the former case. While one coat of paint over the filler will answer, yet two thin coats are still better.

The filler, alluded to as something akin to a thinned varnish, should not be applied so as to leave a glossy or varnish-like surface, for it will not give as good a result. The filler should sink in and leave a mere stain to indicate its presence. If the filler has been applied too thick, brush some turpentine over it before applying the coat of paint.

It has been established that exterior walls coated with cement will take paint all right and without any preparing with filler or other waterproofing, if allowed to stand to the weather for, say, a year. In this time the alkali bleaches out and the cement hardens and so affords a very safe surface for any ordinary paint.



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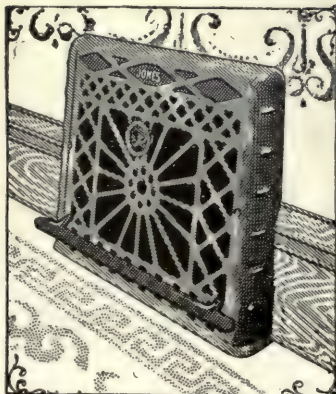
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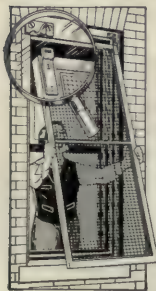
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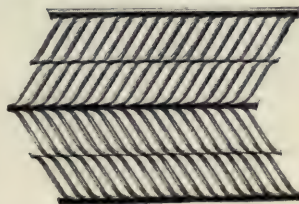


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Care of the Heating Plant in Summer.



THE caretaker of the usual small heating plant is no doubt often perplexed to decide just when and how to clean out his heating apparatus after closing it down for the season and prepare it for the following season's work. It is not at any time an inviting job, and is often postponed from time to time, with the result very frequently that the "good old summer time" slips by; a cold, wet spell in early fall comes along and the heating plant starts up without having received the attention it sadly needs. The family then very likely will complain that "the winter is an unusually severe one, and that the heating plant is no good, the furnace, or boiler, as the case may be, is burning up coal by the ton, and giving out no heat." The reason is obvious, but in nearly all cases is overlooked.

Another result puzzling to the caretaker is the rapid rusting away of the smoke pipe, particularly if it is unprotected by an asbestos covering, which is the usual condition in a small plant, and a condition which should not be permitted to continue, both for the safety of the house and the efficiency of the plant. This rusting of the smoke pipe is the more puzzling because the thin tin heating pipes in a furnace plant rarely or never rust. It must be an exceptionally damp cellar to cause these pipes to rust. The reason for that is apparent upon a few moments' reflection. The heating pipes from the furnace when in operation, carry only hot, dry air, consequently, no moisture is condensed on the inner or outer surfaces of the pipe, and when not in use the registers or dampers are closed and there is, therefore, no circulation of cool, moist air through these pipes as there is through the smoke pipe unless the latter is properly cared for.

The better time to clean out and repair

a heating plant is the first wet day after shutting down the system for the season; the work will then be over with and the plant in condition for immediate service, any needed repairs or attentions are still in mind, while if left until fall are almost invariably forgotten and the rusting of the smoke pipe and other troubles of a similar nature will be avoided. A wet day is the better one to select, if possible, for the reason that the ashes and soot are then heavy with moisture and will not fly all over the cellar and house as they will on a dry day. If you have not already cleaned and repaired your heating plant get busy at once.

The first thing after shutting down the furnace, clean out all the ashes, and examine the firebox and grate to see if any repairs are needed there; it is a poor policy to attempt to run furnace or boiler with a damaged grate.

All furnaces are provided with clean-out doors intended to give access to the radiating surfaces for cleaning purposes and this should be thoroughly well done. Soot and ashes form an excellent heat insulator, and it is good economy to spend considerable time scraping these accumulations from the heating surfaces where they are a great detriment and placing them on the garden where they can be of some use. After this scraping and cleaning has been completed it is well to test the furnace with a smoky fire for a few minutes for leaks which may then be stopped with the asbestos fireclay. If the smoke pipe is not covered, it should be taken down, cleaned, and painted with asphaltum varnish or stove enamel and hung up in the cellar until fall. The reason for removing the pipe is to prevent the circulation of moist air through it, which is sure to cause rust. The hole in the chimney should be closed with a metal cap kept for that purpose. Then shut off the water supply, and after cleaning



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Piping one inch in diameter offers more than seven times the frictional resistance to a column of air than $2\frac{1}{2}$ inches in diameter. *The efficiency of any vacuum cleaner is measured by the volume of air it moves per second.* Therefore you cannot get cleaning efficiency from a system with small piping. **Moral—install 2 1-2 inch pipes with 2 inch openings.** The



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is the cleaner you will eventually want to install. Not immediately, perhaps, but as soon as you have paid off some of the initial expenses of building. *The TUEC System moves the largest volume of air per unit of time of all the vacuum cleaners on the market.* It is the most silent, the most economical, the most simple in design and construction and by conclusive tests the most efficient.

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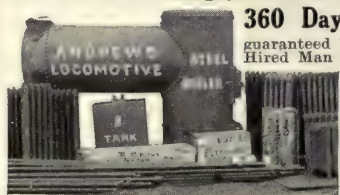
out the ashes, soot, etc., as with the furnace, and attending to any necessary repairs of grate and firebox, open the blow-off cock and let out all the water in the plant, being careful to admit air above the water by opening valves, water gauges, etc. Otherwise a vacuum will be created in the heating system which might cause damage unknown and unsuspected until the system was started up in the fall. After the water is all out, remove a plug in the upper part of the boiler if there is one, or if not, disconnect one of the outlet connections to the main, insert a hose and wash out all the sediment possible.

After all the cleaning and repairing has been completed, all the exposed black iron parts of the furnace should be painted with asphaltum varnish, or some good stove enamel; some of this no doubt will burn off a trifle when the fire is first started, causing a little smoke in the house, but that annoyance will soon be over and forgotten, while the improved condition and appearance of the furnace will last all the year. It is also well to paint, or calcimine the hot and cold air ducts a very light color. This tends to improve the lighting of the cellar and will keep the air ducts tighter; and while on the painting job give the water pan located inside the furnace, and which is presumably of very liberal size, a heavy coat inside and out of asphaltum varnish. This will prolong its life indefinitely.—*National Builder.*

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In the majority of installations the air surrounding the piping is at a lower temperature than that which surrounds the direct radiation and for this reason the loss per square foot of piping surface will average higher than that from a square foot of cast iron direct radiation.

In the average installation we may consider bare piping as increasing the boiler load 45 per cent more than the equivalent surface in cast iron direct radiation. On this basis, piping covered with a good grade of pipe covering would add to the load of the boiler on an average of 15 per cent over that of the equivalent surface in direct radiation—for example:

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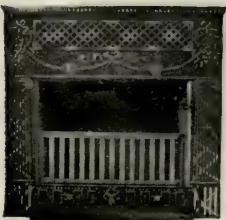
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"All roof gutters should be fixed and down spouts put up before the plastering is done; the down spouts should be temporarily placed about a foot from the wall so there will be no break in the plastering where they are to be finally fixed.

"Wood copings or rails for tops of parapets, balustrades, etc., are not as good as cement, for they may curl up, warp, check, crack and in various ways fail to do what they should—keep water from getting behind the plaster. This also applies to brick chimneys, which, when plastered, should have wide and tight caps of concrete or stone to prevent water running behind the plaster.

"If only wood sills are used, they should project well from the face of the plaster and should have a good drip; either by being placed with a downward slant or by a groove rabbetted in the under side of the sill near enough to its edge that it will not be covered by plaster. The drip is an essential of good stucco construction that cannot be slighted. It must be used to prevent water getting behind the plaster.

"Lath and plaster should not be car-

ried all the way down to the ground; this same restriction applies to brick or stone.

"Care should be taken that all trim be placed the proper distance from the studding or furring to show its right projection after the plaster is on. It is a common mistake to allow too little for the lath and plaster, with the result that molding which should project from the face of the wall are back from it or partly buried under the plaster, thus missing the effect desired. About 1½ inches should be allowed for the lath and plaster, making sure that the projection of the molding to show when finished is not measured in as part of this thickness.

"If corner bead is not used, there should be 6-inch strips of metal lath bent around the corners and stapled over the lathing unless the sheets of metal lath as applied are folded around the corners.

Lathing.

"The lath shall be painted to protect it until it can be applied and covered with Portland cement plaster. Care should be taken not to expose the lath to the weather while it is lying about the building.

"Use metal lath weighing not less than three pounds per square yard spaced at 12-inch centers and fastened horizontally over the furring strips with galvanized staples 1¼x14-gauge. The sheets between furring are to be tied with No. 18 gauge galvanized wire.

"In plastering over the face of the stud the plaster should be forced well through the lath in order to fill entirely the space between the lath and the stud.

"The back-plastering should be a heavy coat well troweled so that the lath is entirely enveloped. The finishing coat may be done in a way to get any one of the many surfaces which give stucco its charm; this coat should contain no lime, as it makes the wall more porous, and if a lighter color is wanted than can be gotten with ordinary cement, a white Portland cement should be used.



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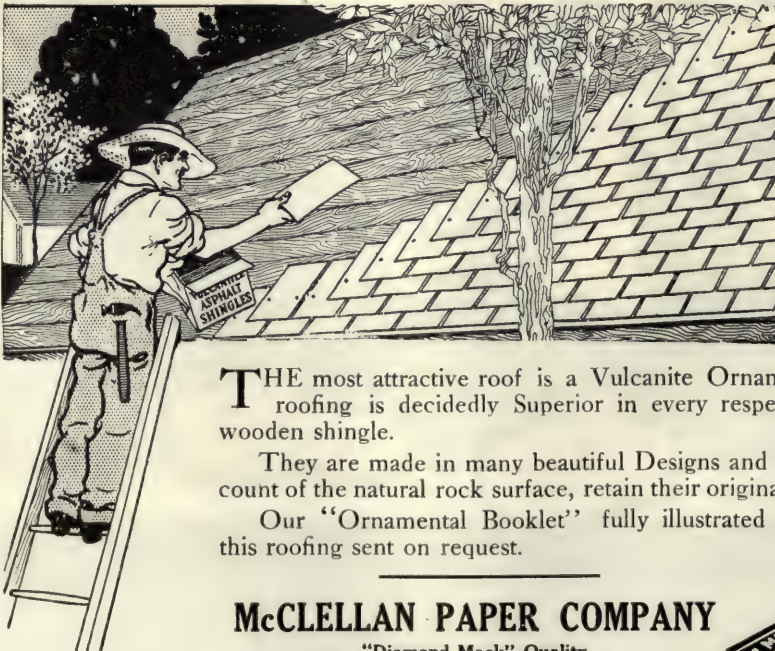
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* * *

We call attention to the new catalogs of the Peck-Williamson Company, Cincinnati, Ohio, illustrating their latest improvement in their already excellent underfeed boiler and furnace.

Correction.

In July Keith's we inadvertently credited Design B-434 to E. B. Rust, of Los Angeles, instead of to Salvanus B. Marston, of Pasadena, the architect of this beautiful cottage.

We very much regret this mistake..



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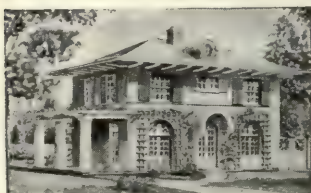
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ON HOME BUILDING

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ENTRANCE TO A PASADENA ARCHITECT'S HOME.

KEITH'S MAGAZINE


VOL. XXX

NOVEMBER, 1913

No. 5

Entrances to Houses, East and West

By Margaret Craig

 HERE are almost as many varieties of entrances to houses as there are varieties of people in the world. It is certainly interesting to observe how an entrance often exhibits qualities of people and their attitude toward the world.

Dignity, formality, and kindly indifference toward the unacquainted guest, or directness, simplicity, and hospitality to all may be manifest.

The colonial entrance with its modifications of pillars and hoods, and sidelights is just as charming as it ever was, and because it is based upon structural principles of architecture it fortunately will exist for many years. It can be made very practical now, for even in reconstructing an old house, by adding such an entrance, the house at once becomes distinctive and attractive.

It is truly quite unfortunate to approach a home and not know exactly which is the main entrance, as one expects to make a formal approach by the correct way. That is why the visitor is more appreciative of a well accented entrance than the owner.

In Salem, the city of beautiful doorways, there are old time entrances that furnish inspiration for many satisfying and carefully designed modern homes. There is nothing about them suggesting the machine or over pretentiousness in design.

So every now and then in different parts of the country we see similar designs successfully constructed. The curved line is so often more effective than the straight lines, and in the old colonial designs the curves of the pillars, the protecting line of the hood entabla-



Classic Doorway, with Brick Terrace Entrance to Home of Dr. Ernest Fahnstock, Schrewsbury, N. J.



Doorway of House in Red Bank, N. J.

ture often indicated the gentle qualities of the inmates. The use of the transoms, and sidelights is not as apparent since the days of electricity, but builders are using various devices to accent the entrance to a home.

A well thought out pathway, of straight or curved lines, is always helpful, and this is often outlined by small trees, garden shrubbery, or stones to give a prettier effect. Then the doorway is especially indicated by the small porch and by the happy placing of the symmetrical Italian cypresses or closely clipped box plants on either side of the doorway, as in illustration number three.

Sometimes steps along the sloping pathway help to lead the guest along the proper way, and the use of pillars, symbolic of the waiting hosts and hostesses emphasize the doorway. An endless variety of trellises, broad and narrow, vine covered, or free from decoration, often add individuality to a colonial doorway.

The frontispiece shows a type of house that might be called Italian. Although possessing the utmost simplicity, by the use of good lines and pleasing choice of material it is very noticeable, and at once attracts the attention of the passer-by.

The white pillars and cornice are brought out in relief against the creamy yellow of the plaster house. Above these the iron grating of the small balcony, which later will probably be covered with hanging vines, and the small casement windows above it, all suggest the foreign lands.

On either side of the pillared doorway stand the two box plants as sentinels, and give the proper proportion. The broad red tiled terrace which runs across about two-thirds of the front of the house, bordered by a red brick wall, gives another note of individuality to this home of a well known Pasadena architect.

The Italian architecture which has now become so popular offers many suggestions for charming entrances. With their chaste simplicity, enhanced by the gentle curves and purposeful use of the cypresses or Lombardy poplar, they universally compel admiration. Here the paths that lead to the doors are usually direct and straight, though many times broken by balustrades or terraces.

In these houses there is often a formal porch with arches, several in number, to mark the definite front entrance at the end of the walk.

Informality marks all approaches to the simple doorways of cottages and bungalows, but the many styles that have been adopted from the English, Dutch, and Japanese furnish an endless inspiration to the little home-makers. The charming illustration of entrance to the bungalow home of a Pasadena lady is a happy instance.

The pergola adaptation in its growing popularity has a picturesqueness quite its own, although it would not prove practi-

cal in an inclement climate. However, it can be partly covered or an awning can be drawn across it when the need

The Elizabethan houses, with their suggestion of the Gothic usually have one gable devoted to the entrance and the



THE DOORWAY IS ESPECIALLY INDICATED BY THE SMALL PORCH AND BY THE HAPPY PLACING OF THE SYMMETRICAL ITALIAN CYPRESS ON EITHER SIDE OF THE DOORWAY.

arises to keep off rain or hot sunshine. The array of bright colored flowers clambering over such a broken porch covering is always a delight.

path leading to it is unmistakable.

In many houses, now-a-days thought is given to an arrangement of porches so as to devote one to the reception of

guests and one more secluded at the side or at the rear overlooking a garden to the use of the family.

There is an attractive style of the Spanish plaster house that has a brick

Three of the entrances that illustrate this article show the use of the cylindrical pillar. The first, which is quite classical, possesses great dignity, because of the height, which is accentuated by the



ENTRANCE TO A PLASTER HOUSE IN PASADENA.

walk leading to the front piazza, which has a brick floor. The white plaster of the walls is repeated in the plaster pillars that support the roof of the piazza, which often consists merely of unhewn slender trunks of trees thrown across the beam supports.

pointed hood. The fan like transom, between the square paneling in the upper part of the doorway, and the box of irregularly arranged plants on only one side of the brick terrace relieve the otherwise too formal lines of this attractive doorway, which though copied from the

Colonial models, is the entrance to a just completed house in Shrewsbury, N. J.

The second of these three doorways, although similar to the first, is less formal although more symmetrical. This is due to the curve of the hood, the balustrade on either side of the wooden porch, and the simplicity of the stairway, approached by a straight walk. It is well balanced by the shrubbery on either side, and the regular placing of square paned windows.

The third of these entrances is quite different and strongly suggests the old colonial in the curved half pillars and sidelights that flank the doorway on either side. It is painted in contrasting colors, yellow and white, also a very old colonial fashion and is the entrance to a house in Shrewsbury, New Jersey. It was built there about fifty years ago.

One of our illustrations represents a colonial doorway in a Pasadena home, which is an interesting proof of the adaptiveness of this type of design to all sections. The ample hood, substantial brackets, which uphold it, the square half pillars, that carry out the lines of the square New England house, are features that make it a striking example of the best architecture of that period. The box of flowering plants placed below the window over the doorway, gives a charm and an accenting note that doubly lures the stranger to this delightful entrance. Not the least of its "points" are the low, broad, terraced steps upon which the doorway opens.

One of the most satisfactory entrances on Italian lines and design is evident in



Old Colonial Doorway in Shrewsbury, N. J.

the fourth illustration. The house is done entirely in grey plaster, and is rendered very out of the ordinary, with its charming casement window above the pillared portico. The use of carved oaken gratings inserted in the side lights, lends a charming touch of the ornamental.

Thus, how evident it is that builders are realizing more and more the necessity of entrances to raise their work far above the commonplace and make it worthy to be compared to the masterpieces of olden times.

The Use of the Pergola on the Grounds

By Warfield Webb



F one has a desire for things that will make the question of outdoor living a real pleasure, and that will also enhance the artistic environment of the garden, there is ample material for such effects, the matter of expense being largely one of individual choice. The real secret of suc-

an artistic planning that is not possible in any other way.

We have gathered some views shown on these pages, that will illustrate our meaning. They show a variety of forms and indicate the possibilities that are to be secured at only a nominal cost. The cost is always a matter that will be left to



A BEAUTIFUL PERGOLA SET ON THE SHORE OF LAKE MICHIGAN.

cess is to be different from the commonly adopted forms.

Take, for instance, the matter of the pergola, which has become a favorite form of landscape decoration. The pergola lends itself readily to many forms of treatment.

As a setting for a garden, there is no other feature that will at once bring the artistic effects and the useful attributes into instant realization. There may be fountains, flowers, shrubs, terraces and kindred artistic adornments, and all of these will do much to make possible the end sought, but if we add to the garden the pergola we have given the whole a wonderful effect, and have rounded out

individual taste and desires, and to the greater or lesser elaboration of the plan in mind. The scheme is to be worked out with judgment, and with its every phase given careful consideration well in advance of any actual work.

The size, length, height, style and kind of material is to receive special attention. The pergola proper is the central feature at times of the entire garden plan, and when this is the case should be carefully planned.

There are so many possibilities here that it is sometimes a difficult matter just how to properly arrive at the desired plan. The pergola can be erected as a summer house, with a half circular cen-

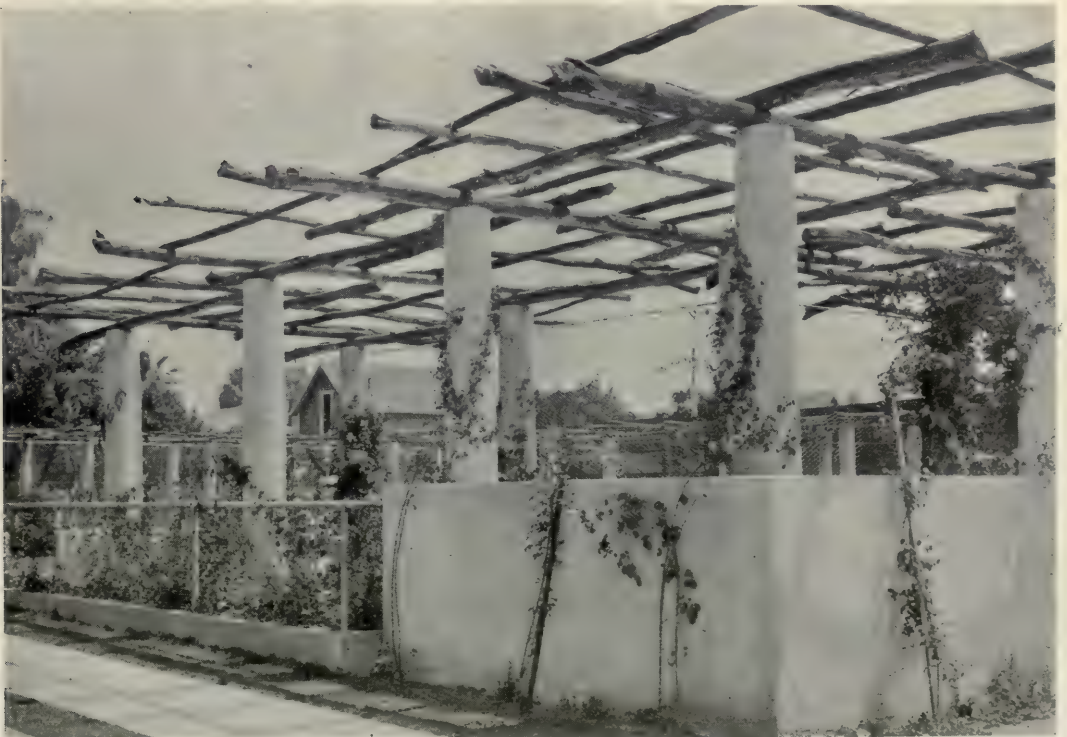
ter effect; it can be erected on the bank of a body of water, and in this way serve as a shelter house, for either boating or bathing.

An example of such a use of the pergola is illustrated in the photograph of a pergola set on the shore of Lake Michigan, and a part of the grounds of S. H. Gunder, Edgewater. The roof of the shelter is of green stained shingles, sheathed underneath with beaded ceiling and ridges of galvanized iron. The columns are of wood painted white and are eleven inches in diameter. The box beams are 6x8 inches, and the crown rafters 2x6 inches. The structure was designed and developed at the manufacturers ready to put together, and cost including everything but the cement foundation, \$280 F. O. B. New York City. The concrete benches near by were furnished by the same manufacturers. The pergola gleams fair and white across the

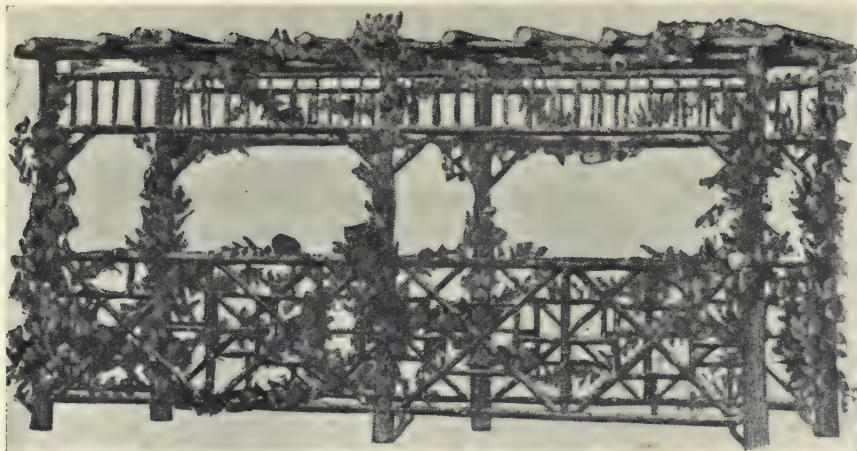
tossing waves, or through the encircling trees.

There is abundant room for choice with regard to the kind of material to use in the building of this structure. Wood, concrete, tile, brick, and even marble and stone have been used in the erection of the pergola. One is generally guided by his personal taste and the character of the grounds. However, wood has been a general favorite, and its adoption has, on this account, been quite general. There are several kinds of timber entering the construction of the pergola, and the climate has at least something to do with this subject. White pine, cypress, fir and red oak are used to a large extent, the use of the former two being more general.

The columns, the principal part of the structure, should be built with care, not alone in the selection of the wood, but also in the manufacture of the col-



CORNER OF RUSTIC PERGOLA IN THE GARAGE ENCLOSURE.



PERGOLA OF OLD HICKORY POLES.

umns themselves. The most desirable method, thus far found, has been the stave or built-up column. This obviates the likelihood of cracking or warping, and other detail should be of like material, period. The capitals, beams, rafters and life of the column last for an indefinite the wood being well seasoned makes the and there is small danger of error, if the

matter of selection of stock is placed in hands of the manufacturers who are giving this work particular attention.

The size of the columns, style of the caps and general details are not to be left to one who is lacking in the proper knowledge that such work demands. It is proper to first make a complete study of the individual piece of work in hand,



SIMPLE, BUT PLEASING GARDEN ENTRANCE.

and to make one's plans in accordance with these plans. Failure will be the only outcome where there has been a want of this in advance. Insuring proper measurements, and bringing the finer details to the point of completion will demand that the subject be well in hand in advance of any work, or even of any stock ordering.

In striking contrast to the first illustration is the pergola of a Pasadena garden, leading to the garage, and composed of concrete pillars, garlanded with vines and capped by a rustic roof of unbarked poles.

Among rustic materials for lawn decoration nothing exceeds the charm of Old Hickory. Constructed of sassafras poles with the natural bark left on, the rustic gates, arbors, pergolas and lawn seats of this material are among the most substantial, as well as artistic, of garden adornments. Moreover, they can be secured in a portable form, ready to set up.

When the pergola is constructed of wood, the foundation is generally of cedar or fir posts, placed several feet in the ground, and the columns are slipped over these and secured with iron bands. One can make the floor of any material desired. Red Welsh tile are popular, concrete, mosaic work or marble blocks. All of these are used with more or less

success. Where it is desired, benches, urns, sun dials and other decorative features are placed in and about the pergolas. The pergola may be a background for a garden, or serve as an entrance to shrubbery, or be worked into the scheme of a formal garden. It may be a simple part of the garden planning, or it may be, and has been used in a limited way for outdoor theatres. This latter form is new, and in line with the increasing popularity of outdoor theatricals. There are traveling companies who devote themselves to giving high class outdoor performances, and there are also a larger number of private performances that find the pergola theatre a very artistic stage setting for the proper production of such affairs.

There are some instances of the pergola being used as a setting for golf grounds. For bridging a ravine the pergola has been found a very admirable form of construction. One might go on for a longer period describing the uses to which this old-new form of lawn decoration has been put, and the end is seemingly not reached. With each year there has been a working out of newer ideas, and the desire nowadays to live in the open makes the matter of its construction a pleasant and a very artistic form of garden decoration.



AN OUTDOOR THEATRE.

Hints on Building a Satisfactory House

In Two Parts---Part II---Inside the House

By Charles K. Farrington



WE could not afford tile in the vestibule much as we would have liked to have had it. So we were content with linoleum. Purchase as we did, the best quality. Ours was blocked off in squares about the size of ordinary tile, the pattern being carried all the way through. This last is most important, for as the linoleum wears (and it is subjected to heavy wear in the vestibule) the pattern still shows. It is important to have such material on any vestibule if tiles are not used, for it is almost impossible to keep an ordinary wood floor clean in such a place, and if the vestibule is dirty, dirt will be likely to be spread throughout the house.

In order to save on the cost of electric batteries for the bell work of the house we installed a small electric bell transformer. This takes the street electric current, and allows the electric bells in the house to be rung thereby at practically no expense. Electric batteries have to be renewed at intervals, and this makes expense, not only for the batteries but for the labor of installing them. The inexpensive device above referred to, does away with this expense.

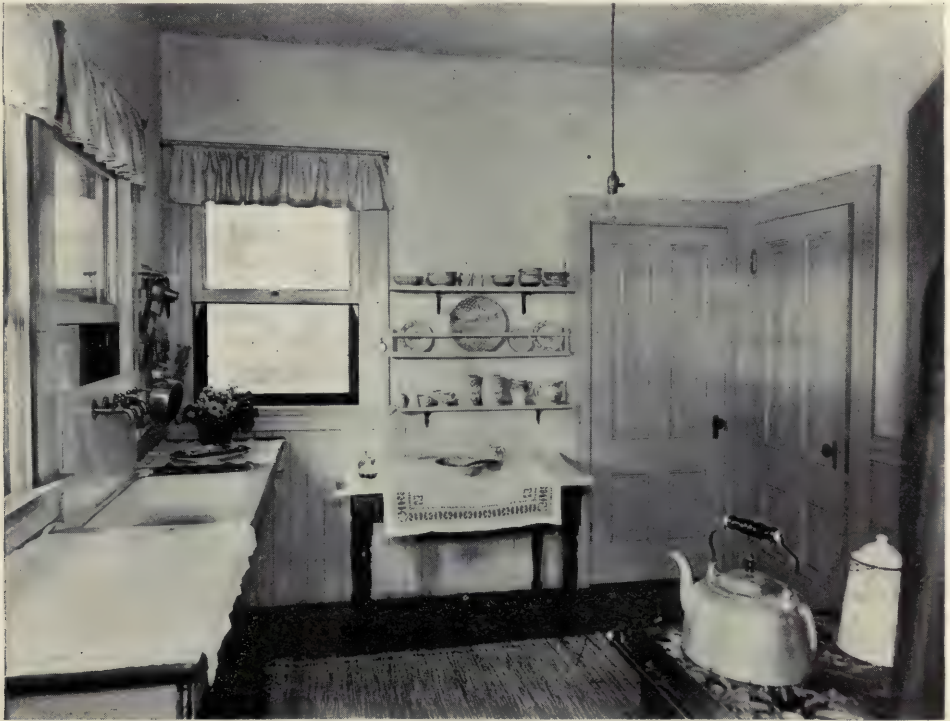
We installed at little expense a telephone (private, interior one) from the kitchen to the owner's second story room. These little inexpensive house telephones are far superior to the old fashioned speaking tubes, and as we planned for only one maid the housewife needed to be spared all unnecessary steps.

We had learned from experience (bitter experience) that the best location for our ice box was off the "butler's pantry," for off the kitchen is too warm a location, and in the cellar made too many steps for the one maid, or housewife on days when the maid was out. We arranged it to be iced from the back porch, and thus saved muddy iceman's feet from dirtying our clean pantry floor. In one corner of our cellar we built a closet of matched boarding. We made a fine storage closet for vegetables, etc. A window allowed air to be obtained from outside and we could regulate the temperature nicely. Potatoes, apples, etc., can be purchased in quantities at the beginning of the season and stored away in such a room safely without danger from frost or unusual decay. We first planned this room to be on the first floor but space was at a premium there and we could easily plan for a much larger room in one corner of the cellar, away from the furnace, or pipes from it.

Not only did we cover our heating pipes with a protecting covering to prevent useless radiation of heat in the cellar, but also where the pipes passed through closets, etc., on their way to the upper parts of the house. Remember that such a plan means coal saved each year, and coal saved means money saved. We needed to make such a saving. We also planned to make as large a saving on our lighting bills as we possibly could. Therefore we used "turn down electric

lights" in the bathroom, halls, etc. These could be turned down upon leaving them and proved money savers. We arranged our front hall light so that it could be turned off when we reached the second story, also light at our furnace was arranged so it could be turned off after we had reached the top of the cellar stairs. The wiring cost of such system of light-

All trim, not only in the first story rooms but throughout the entire house, was of a perfectly plain pattern. Anyone who has tried to clean dirt out of molding which has been elaborately worked will understand how good this plan is. Take for example the elaborate cap which is so often placed upon the base board of the different rooms and see the



OUR KITCHEN—WITH HOT WATER BOILER PLACED IN PASSAGE OUTSIDE.

ing is small when one finds how lighting bills are cut down by so doing. We tried not to think only of the first cost when the future cost meant so much saved. Too often lights in such places are left turned on unnecessarily for long periods of time.

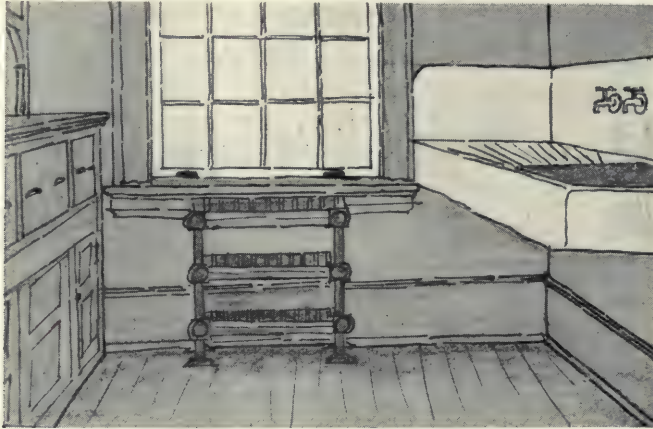
All our radiators were painted black instead of the "gold" or "silver" color one finds so many times. This was done to save later expense in repainting. Black keeps indefinitely, while gold or silver paint must be renewed from time to time. A radiator painted black is far less noticeable also.

amount of dust and dirt it will collect. This is also true of the rest of any trim which is elaborately worked. "Flat" corners were also used to protect the sharp edges of any plastered room, etc., instead of the customary round ones which were so much used a few years ago. They take up less room, and being perfectly plain do not collect the dust as do the old style ones which invariably had fancy tops.

The butler's pantry was placed underneath the bathroom, and the maid's bathroom was placed above the owner's. This was done to have as much plumbing as

possible in a straight line so as to reduce the cost. Bathrooms scattered about a house make its first cost considerably above what it would be if they were placed near each other. Then if care is also taken to place the kitchen and laundry plumbing, as close as possible to the pantry and bath room plumbing, much money can be saved. Also there will be a future saving as regards repairs. The less piping the less repair work one will have.

sink, the butler's pantry and bathroom faucets are very apt to leak. Shut off valves will not only save water but will also allow these different parts of the plumbing to be out of commission without affecting other sections. The cost to install these valves is small when the plumbing is being put in. The convenience is great later on. It costs but little more to connect the kitchen range boiler with the waste so that in case of repairs to it or its piping the boiler can be emp-



THE KITCHEN PANTRY HAD A WINDOW IN IT.

The kitchen range hot water boiler was placed just outside the kitchen in the passage leading to the front hall. This made the kitchen much less warm in the summer-time. Next to it was a gas heater which warmed the water when the coal range was not being used. The boiler therefore could be supplied with heated water in two ways, from the coal range or from the gas heater.

All sections of the plumbing were supplied with shut-off valves. Few house-builders realize the great convenience a liberal supply of shut-off valves will give. Each water closet supply tank should have one. Then it will not be necessary to shut off the entire water supply of the house when any part of the tank gets out of order. The laundry tubs, the kitchen

tied by simply turning a stop cock, and not by the crude and tiresome method of filling a pail and emptying it the large number of times necessary say to empty a forty gallon boiler.

The kitchen pantry had a window in it. This window was of sufficient size to allow ventilation in warm weather, and the contents of the pantry kept much better on account of the window. The available space in the kitchen was limited, and to save as much room as possible the drain board of the sink was set as far from the floor as possible. A medium sized table could be pushed under the drain board when it was not in use. The table was one of the kind which allowed the sides to be let down when the table was not in use.

Second Floor

Many details mentioned in reference to the first floor would apply to the second also, and again to the third story. To save labor in cleaning underneath, our bath tub was set directly on the floor being of the legless type. To economize upon room in our bathroom a "wall radiator" was used. Instead of the large and often useless closet in the bathroom a convenient "wall medicine closet" was installed. All piping was on the **inside** wall. This made the danger from frost much less. A little planning will make such improvements possible in almost any bathroom. The door knob and lock was placed higher than usual upon our bathroom door. This was done to prevent the small children from entering by themselves and throwing things down the closet or turning on the water. From bitter experience we learned how desirable a thing this was.

All gas and electric fixtures were of a pattern which allowed them to be close to the wall for all of our hall lighting upon the second and third stories. Then furniture can be carried by without having them broken. So often the writer has seen "straight out arm brackets" used in such places; often to their injury.

Third Floor

An attic often becomes excessively warm in hot weather from radiation from the roof. Small vents are often made in the eaves to allow the warm air to pass out. This greatly assists in keeping the third story rooms cool. But few people think to cover these vents with netting to keep out mosquitoes and flies. It is

best to use galvanized iron or cover netting, and to paint it before putting it up, to prevent its rusting.

We planned whether to use a single or double bed in all the bedrooms and had our architect draw them to scale in each room in order to plan exactly where we could place them and other furniture to the best advantage. We also had him draw the dining room table and chairs around it, also the sideboard, so we knew beforehand if the room was large enough to comfortably seat our family. It is a good plan to draw to scale on plans such pieces of furniture or any other unusual or large piece.

We also insisted upon quality being mentioned in all material or plumbing or other fixtures throughout the house. Wood is sold in various grades. We required explicit information regarding what kind was specified in each instance. Even our outside leaders from the gutters were a certain specified quality. It is in watching these (small it often may seem, in reality they are large) details that one secures freedom from large repair bills later on. Get a guarantee upon your kitchen range boiler, and note for how long it is guaranteed. For outside tin work we specified "graphite" paint, experience teaching us that it was far superior for metal work (gutters, valleys, etc.) which is exposed to the weather.

In conclusion the writer would say he has tried to mention in this article things commonly not thought of by those who undertake the difficult yet pleasant task of building a satisfactory and inexpensive home.

EDITOR'S NOTE.—We think Mr. Farrington's generally excellent ideas could be improved upon in respect to the location of the hot water boiler, which the best usage now places in the basement beside the heating plant, with the gas heater beside it and attached to it. We should disagree with him also in the matter of painting the radiators black, a small economy which is not worth the price of the heavy and funereal aspect such a method imparts to the rooms. It is not necessary for the radiators to be gold bronzed. They may match the walls or the woodwork.

The Vogue of Period Furnishing

By Eleanor Allison Cummins

NOT every one wants to have a house furnished in the style of a particular period, and indeed what is called period furnishing is somewhat out of place in the average house, for the reason that the types of furnishing which have come down to us as characteristic of the various historical periods, are usually those of the palace or the chateau rather than of the dwellings of that middle class, to which most of us belong. The exception is the Dutch style of furnishing, which was comfortable rather than splendid or elegant, and which was the inspiration of much of our own colonial furniture.

One good thing has resulted from the copying of historic styles of furniture, and that is the lessening popularity of golden oak. Comparatively little of the newer furniture is in light tones. When a light color seems to be desirable, the bed, or chair, or table is frankly white, or maple in its gray or yellow tones is used. Or else some delicately colored enamel is used, the stone gray of the French decorators, a greenish gray, or the grayish blue dear to the Adam Brothers. But for furnishing which pretends to any artistic quality the strongly marked, highly varnished, molasses taffy colored oak has fallen completely into



A BEAUTIFUL DRAWING ROOM IN WHICH COLONIAL FURNITURE IS ASSEMBLED WITH GOOD EFFECT. THE STRAIGHT CHAIRS ARE CHIPPENDALE. THE ONE AT THE ANTIQUE PIANO IS HEPPLEWHITE. NOTE THE "TIP-TOP" TABLE.

disuse. And this is a gain in more ways than one, for apart from its essentially disagreeable color, it is almost impossible to contrast golden oak successfully with anything else. English decorators, it is true, use light colored oak, but its tone is entirely different from that of our native wood, and even they employ it with great discretion.

of sofas or chairs being nearly covered by one of these medallions, an all-over design in harmonizing coloring being used for the seats. Sometimes floral medallions, round or oval, are used.

The English Trinity

The first part of the eighteenth century is notable for the introduction of mahogany, for a distinct effort to make



THE DINING ROOM—PANELED IN WHITEWOOD AND FURNISHED IN MAHOGANY—HEPPLEWHITE DESIGN.

We have little interest in the French furniture of the earlier periods. But with the reign of Louis XVI and Marie Antoinette we come to the simplest and diantiest of the French styles. The pieces are much smaller than they have been, legs are straight, backs usually square, ornamentation of the simplest, delicate flutings and classical wreaths. The pieces are covered with light-colored, dull-surfaced tapestries, sometimes striped, sometimes figured with pastoral scenes, in the manner of Watteau, the backs

furniture lighter and more graceful, and for the prevalence of the Dutch influence. The curving "bandy" leg, the fiddleback chair and the high chest of drawers, called a highboy, are all associated with this period, which is known as the Queen Anne. Some of the best English silver was made at this time, and it is also notable for the importation of Oriental china, while many of our recent wall papers and textiles have been inspired by the crewel work, which was the favorite occupation of the ladies of the day.



ELABORATE AND BEAUTIFUL FRIEZE IN COLONIAL DINING ROOM, WITH SHERATON FURNITURE. NOTE THE "URNS" FOR
SMALL SILVER TOPPING THE SIDEBOARD.
—By Courtesy Wall Paper News.

The period of the first two Georges merely carried on the traditions of the age of Anne, but by 1754 the three great designers, Chippendale, Heppelwhite and Sheraton, were all at work, working with their own hands as well as designing.

Of the three, the greatest is Chippendale. He published a book of designs which marked an epoch in the history of

chairs and sofas with him, the latter usually formed by placing three chairs side by side. Possibly settee is a better word than sofa. He retained the curved leg of the preceding period for the fronts of his pieces, but the rear legs are straight and tapering. Both chairs and sofas were wider at the front than at the back. The backs of both chairs and sofas were ex-



DINING ROOM SHOWING USE OF COLONIAL BUFFET.

English furniture, and his name conveys a far more definite idea to the average person than that of either of the others.

In his earlier work he was much influenced by Chinese ideas. He made cabinets and screens with panels of lacquer framed in intricate interlacings of narrow strips of wood, which were probably copied outright from Chinese pieces. The number of these early pieces is small and they bring tremendous prices. Later he developed the style by which he is most commonly known. We generally asso-

tremely elaborate, the designs suggesting interlacing ribbons and ornamented with a great deal of delicate carving. But this wealth of ornament is always subordinated to, or used to emphasize, the construction. Honesty underlies every piece Chippendale ever made.

Chippendale made all sorts of pieces besides chairs and sofas. His upholstered sofas, with a low puffy back like a bolster, belong to his Chinese period, and have been very successfully reproduced by American cabinet makers. His cab-

inets have charming latticed doors, and while all of his work was substantial it was also exquisitely delicate. One of his characteristic pieces is the small fire screen of glass framed like a mirror, mounted on a high standard, and just big enough to protect the face. I remember seeing one of these screens in a very old world parlor, when I was a little child, and I have seen it reproduced within a few years.

The bulk of the antique furniture sold as Chippendale, is not from the hand of the master, nor even made under his supervision, but was made by cabinet makers working from his designs. He was very much the fashion, his output was limited, and the chances in favor of much of his work having reached America is very slight. But even in modern reproductions his style has great distinction and charm. The recent fancy for things Chinese has set the shops to copying his Chinese designs and some of the simpler pieces are very interesting.

He made many card tables and writing desks, and originated the kidney shaped top for the latter and for tables. His sofas are quite long, very simple in outline, never overstuffed or tufted, and many have four front legs. Small panels of inlaying are set in at the centres of frames of seats and backs. His chair backs are nearly square, have fluted or turned frames and often considerable plain surfaced solid pieces of wood set into the centers. The long, low sideboard without any back, raised on slender legs, with closets at either end is one of Sheraton's typical pieces.

The Adam brothers were also at work, but their furniture-making was rather an accessory to their architectural work than an art in itself. Their work was an adaptation of classical ideas. The furniture made for them was usually of white ma-

hogany, delicately painted and inlaid, with painted medallions set into the back of chairs and sofas. Some of the furniture was of course upholstered, more of it had cane seats and backs. Tables were generally oval, with painted tops and four fluted legs. They used tall cabinets for China and curios, standing on legs and with delicately made latticed doors. The walls of their rooms were generally panelled in white wood, with much finely carved ornament, and the ceilings were similarly adorned. The whole effect of an Adam room is light, bright, dainty, with a wealth of beautiful detail.

Much Adam furniture is to be had, and it is an excellent choice for a small reception room, as while it is unsuitable for general use, it has a permanent artistic value, from its beauty of form and delicacy of finish. It is, of course, modern, and it is well to eschew the pieces with painted medallions, as they are not, like those in the old pieces, the work of artists, but rather mechanical performances. As with all reproductions, the simpler pieces are the better ones.

The Colonial "Beaufet"

One of the interesting features of the colonial dining room was the beaufet, or as the ignorant called it, "the bowfat." This was a corner cupboard with arched glass doors and some carving above them. Frequently two of them flanked the fireplace, at one end of the long dining room. The lower part of these closets had solid doors, behind which liquors were kept, while the glass doors enclosed the fine "chaney." In the modern adaptation, fireplace and cupboards are at one end of the room, with a bow window at the other, making the shape of the room a long octagon. These beaufets were by means an American fashion, and one sees them in the Georgian interiors of Dendy Saddler.

Points in Favor of the Stucco House

Applying the Metal Lath Direct to the Studding

THE perfection of building materials designed to resist fire has been such that now a residence can be built, at least fire-retarding, at little or no increase of cost. The solid brick or stone wall in residences is a known quantity, the "poured concrete house" is not, as yet, so well established, but with nonburnable roofs, houses built any of these ways would afford the suggested needed protection.

Considerations of cost, however, enter often; also architectural and aesthetic reasons prevail to the extent of prompting a desire for "something different." The stucco house has been evolved from these conditions and there is good reason for its popularity. There is nothing in building construction that so pleasingly harmonizes with Nature's color tones as

the soft gray of the stucco house; it looks permanent, too, like stone and brick without the severity in its lines or excessive cost of construction.

The cry of "fake" and "sham" is periodically raised by the starving purist and the millionaire iconoclast at this form of construction. As a matter of fact, "Stucco applied to a wood skeleton is neither a false form of building nor an imitation, but merely a humble device invented by the forefathers of the Man of Moderate Means to keep out the elements by plastering their huts of reeds with a coating of mud." Stucco in the past was invariably employed to cover some foreign surface of unsightly appearance, and as such performs a legitimate office.

Stucco is sometimes applied to brick, also to wood lath and tile and another



GOOD STUCCO TREATMENT OF A SEMI-BUNGALOW.

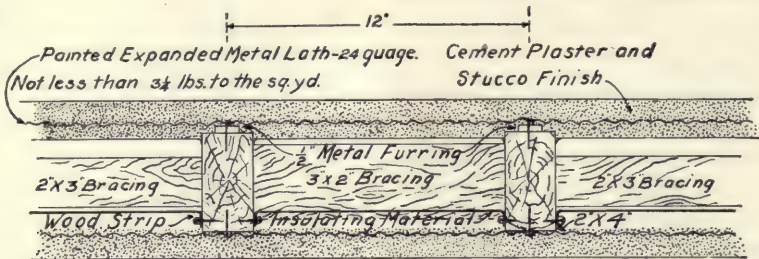
popular combination is cement plaster on metal lath. This latter type applied over wood sheathing, the ordinary construction will cost about 3 per cent more than the ordinary clapboard wall used in a frame house while a stucco wall built by fastening metal lath direct to the studding and back-plastering will cost less than frame construction and is superior to it for its insulating properties, rigidity, fire resisting and enduring qualities.

Stucco on metal lath built in the manner suggested without sheathing is recommended by the metal lath manufacturers as the result of extended research

either to or by them. This is being done every time a frame house is put up and what is here advocated in the way of various suggestions as to fire-resisting construction should, if followed, go a long way toward reducing the present waste of created resources by fire.

The arguments for fire-resisting construction of residences should appeal strongly to the country or suburban dweller who is away from the fire protection facilities of the city.

The attention of architects and builders has been much attracted of late to the new method of applying metal lath to the



DETAIL SHOWING METHOD OF APPLYING METAL LATH DIRECT TO STUDDING.

into the subject and any of the manufacturers could supply typical specifications.

In a fire test recently held at Cleveland, a stucco wall on metal lath like that recommended was subjected to two hours at a temperature of 1,700 degrees and then was flooded with water from the fire hydrant. The wall was still in a condition to protect adjoining premises when the test was concluded.

It is reasonable to believe that houses thus built, and with nonburnable roofs, will protect the lives and property of home-dwellers and absolutely prevent the spread of fire through a residence section.

Considerations of the public good as well as one's own comfort and peace of mind should prompt the builder of a house not to concentrate a pile of fuel conveniently equipped with flues, in places where fire can be communicated

studding direct, as such construction reduces the cost appreciably.

The valuable fire-retarding qualities of the stucco house together with its other advantages, that is, insulation, possibilities for architectural excellence, low cost of maintenance, enduring qualities and consequent graceful aging seems to make it fit well for the out-of-town house. Even though it wears well, the effect is such that one does not tire of it.

In this connection we reprint from the August Bulletin of the Associated Metal Lath Manufacturers, the standard specifications for applying exterior stucco in this method.

Specifications for Applying Metal Lath to the Stud Direct.

The finishing coats are applied in the usual way.

Inside Waterproofing—(a) The faces of the stud and for one inch back of the

face on each side where the plaster may come in contact with them, shall be thoroughly waterproofed with tar or asphalt.

(a) The first coat shall be applied to the outside of the lath and pushed through sufficiently to give a good key. Over the face of the studs the plaster shall be forced well through the lath in order to fill entirely the space between the lath and the stud. The backing coat shall be applied to the back of the lath

ened as to clear the bridging, leaving the preponderance of the air space next to the plaster. Care must be taken to keep the insulating material clear of the outside plaster and make tight joints against the wood framing at the top and bottom of the spaces and against the bridging where the face intercepts.

Mortar Coats.

Plaster.—(a) The first coat shall contain not more than two and one-half



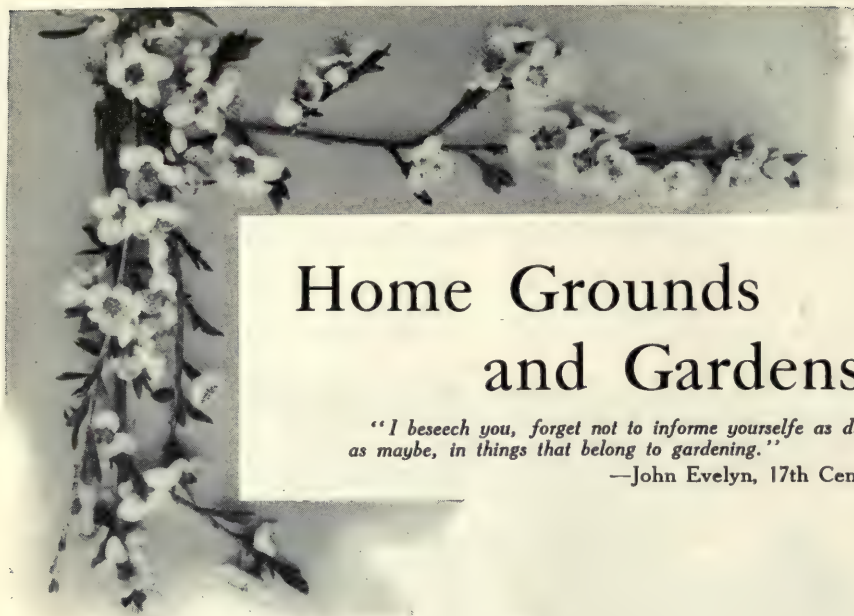
STUCCO DESIGN SET WELL AMONGST BEAUTIFUL SURROUNDINGS.

and shall be thoroughly pushed back into the mortar with a clean wood trowel, but no rubbing of the surface shall be done after the pebbles are embedded.

Insulation.—(a) After the lath on the outside has been back-plastered, the air space may be divided by applying heavy building paper, quilting, felt or other suitable insulating material between the studs, fastening it to the studs by nailing wood strips over folded ends of the material. This insulation should be so fast-

($2\frac{1}{2}$) parts of sand to one (1) part of Portland cement by volume. If lime putty is added, it shall not be in excess of one-third ($\frac{1}{3}$) of the volume of cement. Hair or fibre may be added.

Thickness of Coat.—(a) The first coat shall be at least $\frac{3}{8}$ in. thick over the face of the lath and project through behind the lath about $\frac{3}{8}$ in. The backing coat shall increase the thickness behind the lath to not less than $\frac{5}{8}$ in. The final coat shall be not less than $\frac{3}{8}$ in. thick.



Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

—John Evelyn, 17th Century.

Planning the Garden in the Fall

By Harry Franklin Baker

DURING the recent convention in Minneapolis of the Society of American Florists and Ornamental Horticulturists, the writer had the pleasure of driving about the city Mr. Leonard Barron, editor of the Garden Magazine, published by Doubleday, Page & Co.

Mr. Barron was both delighted and surprised with the grounds and gardens he saw here, expressing himself as follows: "Do you know, I would like to live here. Minneapolis leads America in the beauty of its small gardens and suburban grounds." Mr. Barron is one of our foremost authorities on landscape gardening and American gardens.

The grounds surrounding every man's home should be attractive. A man owes it not only to himself and to his family, but also to his neighbors and his city. Have you done all you can to improve

your grounds? Now is the best time to begin, for of all seasons of the year, autumn is the best.

The planting season will open in two or three weeks. Then there is only left a month or two before winter sets in. Therefore it is necessary to act at once.

Some of the most desirable annual plants to raise from seed are zinnias, marigolds, asters, calliopsis, and Phlox Drummondii.

Plant crocuses and narcissi through the border wherever there is room. Every garden should contain a few varieties of tulips. By choosing in addition to the early, some of the late flowering varieties, such as Cottage and Darwins, tulips may be had in bloom for several weeks during the spring, and they are a source of great pleasure to all who see them. These flowers all grow from bulbs and must be planted in the fall.

In making the beds, dig the ground out to a depth of fifteen to eighteen inches. If part of the soil is sand or gravel it should be removed and replaced with good dirt. Then throw the dirt in, mixing thoroughly with any kind of stable manure. If the manure is rotted one-fourth to one-fifth manure may be added. Be sure to break up any lumps, have the ground soft and pliable.

In setting the plants, dig each hole

inches. When spring comes watch the garden carefully and as soon as the frost is out of the ground and the plants begin to grow some of the covering must be removed or else it will smother the plants, causing the plants to die. After the frost is completely out of the ground and the days grow warmer, your garden will spring into life and be a source of delight and pleasure to you day after day.

In selecting the plants choose mostly



IN THIS GARDEN ARE PROVIDED, IN ADDITION TO STONE SEATS, A TEA HOUSE IN WHICH THERE ARE CHAIRS AND HAMMOCKS.

large enough to receive the roots without crowding, cover them with the dirt and press down firmly. If you plant this fall, and fall is the best time for most of the plants mentioned above, especially the bulbs, peonies, iris and other early spring flowering plants, you must water them carefully and see that they do not dry out before winter sets in.

It will be necessary to cultivate them if the ground cakes or bakes around the crown of the plants. When the ground begins to freeze cover the plants lightly with leaves, straw or manure, and when the ground finally freezes hard for winter increase the covering to a depth of six

perennial varieties and keep constantly in mind their habits, whether they require much sunlight or get along in partial shade. The height to which they grow is another important consideration. Place the tall ones in the rear, the lower ones in front of these and finally the dwarf creeping varieties for the border.

Generally speaking, perennial plants are much more pleasing when used in groups or colonies. While you may be charmed by a picture of a dozen or more of perennial plants growing in a group, if you plant a single specimen of these in your home garden you are apt to be greatly disappointed. Of course there



BUT THEN I THINK OF PEONIES AND PHLOX AND REALIZE THAT I MUST SAVE ROOM FOR THEM:
PEONIES SHOULD BE PLANTED IN THE FALL.

are some exceptions to this rule, one that occurs to the writer at present is the hollyhock, which is always attractive whether used as a single specimen or in colonies.

One must try to avoid planting near each other plants which, when in bloom, if their blooming season is the same, will not be in harmony. The earlier spring blooming plants should generally be planted where they can be seen either from the house, walks or drive. At this time one does not spend quite so much time out of doors.

The arabis is a beautiful spring flowering plant, which creeps along the ground. Several varieties of the aquilegia or columbine are spring flowering plants and grow from twenty-four to thirty-six inches high, so they should not be placed in the foreground.

The *Aquilegia flabellata* is a very good border plant as it has neat foliage and does not grow so tall. Another good border plan is the *Iberis sempervirens*, a perennial candytuft. Try *Alyssum saxatile* where a yellow flower is desired.

One of the brightest, most cheerful,

little spring flowers that I know of is the *Trollius Asiaticus*. Sometimes it does not bloom for a year or two after planting but it is well worth waiting for. Then comes the Iceland poppies and the German iris. When I see German iris in bloom I would like to fill my whole garden with it, but when I think of the peonies and phlox and I realize that I must save room for these, so you see the amount of space one may give to these flowers is determined by the room that will be left for other plants that may be desired. While a few plants of some varieties will be sufficient, of iris, peonies and Phlox a garden should have a large supply.

Pyrethrum Roseum and Shasta daisies, *Gaillardia* and *Coreopsis* grow to a good height and furnish a supply of flowers for cutting. *Delphinium* are indispensable in the garden, both for cut flowers and their decorative effect. The Oriental poppies are gorgeous while in bloom but should be planted in the distance as they die down through the summer after blooming, and present a very untidy appearance.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 457 JOHN HENRY NEWSON, Cleveland, Ohio

B 458 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 459 KEITH'S ARCHITECTURAL CO., Minneapolis

Design No.

B 460 F. E. COLBY, Sioux City, Iowa

B 461 LOWE BROS. CO.

B 462 R. C. POWELL, Dayton, Ohio

Design B457



TYPICAL modern English cottage and a most delightful home for a small family. The large cobblestone chimney with the casement windows lends character and a sense of coziness.

The house is entered through a vestibule and directly in front of the living-room is a large fireplace set in a tiled nook which has a seat at each end and a row of windows extending from one side of the mantle to the corner of the vestibule, giving an elegant vista from the living-room. The stairs are directly accessible from the livingroom as well as from the kitchen.

On the second floor are four chambers and bath.

The basement contains a lavatory and hot water heating plant. The exterior walls are covered with shingles, stained brown.

Estimated cost including hardwood floors throughout and hardwood finish first floor, and pine to paint for the balance, is given at \$3,700.

Design B458

The accompanying "Half Timber Design" planned in the English style has a frontage of 38 feet, including the side piazza that comes under the main roof and a depth of 30 feet. The exterior walls are veneered with brick up to the top of first story windows and above, the walls are finished with half timbers showing and cement with a dash surface between.

The stories are low, being 8 ft. 6 inches

in first floor and 8 ft. in second, with a low-pitched roof and the left hand wing dropped with a story and half effect and dormer windows lighting the second floor. This second floor is full height and provides a good large bedroom and bathroom, the main portion in the second story including two bedrooms and sewing room, ample closets, etc.

The principal floor has a vestibule entrance into a livingroom 14 feet by 18 feet with a wide fireplace opposite the entrance. This room opens with wide windows direct to the front giving plenty of sunshine and at the right through a wide arch connects with a den or music room, with book shelves and opening with wide French windows on the side piazza. At the rear of this den the main stairs lead to second story. The dining room at rear of main livingroom connects through wide archway and is conveniently connected with the kitchen across the rear through the large pantry. The entire arrangement of this house is unique and very convenient. The estimated cost exclusive of heating and plumbing is \$4,000. The finish is in hardwood with polished floors and a painted or enameled finish in the second story. This house is specially well adapted to a corner lot and will look well from all sides.

Design B459

This exterior is one of the new type homes designed with an exceptionally low hip roof with wide overhanging cornice.

The first story veneer is a rough tapestry brick laid up in colored mortar with

wide raked joints, with a stone water-table, buttress-cap and wall copings, and shingles stained brown for the second story. Cement plaster might be substituted for the shingles on the second story walls and a tile roof thus adding to the attractiveness of the design but this would likewise increase the cost.

The large porch which has nearly all been covered gives the impression of a very large house, while the plan exclusive of the porch, the projected kitchen and entry is only 45 feet wide by 32 feet deep. The interior also gives an air of spaciousness with its large reception hall, its liberal staircase and massive brick fireplace. This is accomplished by making the rooms generous in size and fewer of them, in fact this would make an ideal, inexpensive home for a small family where a great deal of entertaining is done.

The large livingroom 15x30 has a brick fireplace that is 7½ feet across the hearth. French doors open into the sun porch on the side and on the open terrace in the rear. The ceilings of this room are beamed as well as those in the diningroom, while the hall has a half beam running around the corner of the ceiling and the walls are wainscoted to a height of five feet.

The pantry is large with glass cupboards and work table, while the kitchen and rear entry accommodations are very complete.

On the second floor are three medium size chambers, a sewingroom and a large owner's chamber which has an open fireplace and a French door leading onto a sleeping porch.

Beside the sleeping porch there is a balcony on the rear where bedding can be aired, and the plan is very complete throughout.

The floors are of white quartered oak with maple floor in the kitchen and tile floor in the front vestibule. The finish throughout the first floor is brick stained

mahogany with white enamel in the kitchen.

Floors and finish on the second floor are birch.

The foundation walls are of concrete, the basement is 8 feet high and contains a large laundry furnace and storage rooms with a hot water heating plant and complete electric wiring for electric appliances, vacuum cleaner, etc. Estimated cost under normal conditions, \$9,500.

Design B460

In this design the veranda, 10 feet wide and 36 feet long, is quite an important feature.

The livingroom, while of good size, would make still a better shaped room, were it not for the vestibule projected into the room. As will be seen from the illustration the climate where this residence is located would hardly permit the omission of this sometimes less important feature, the vestibule. A chamber with large closet and private toilet was provided for on the first floor to meet certain family conditions.

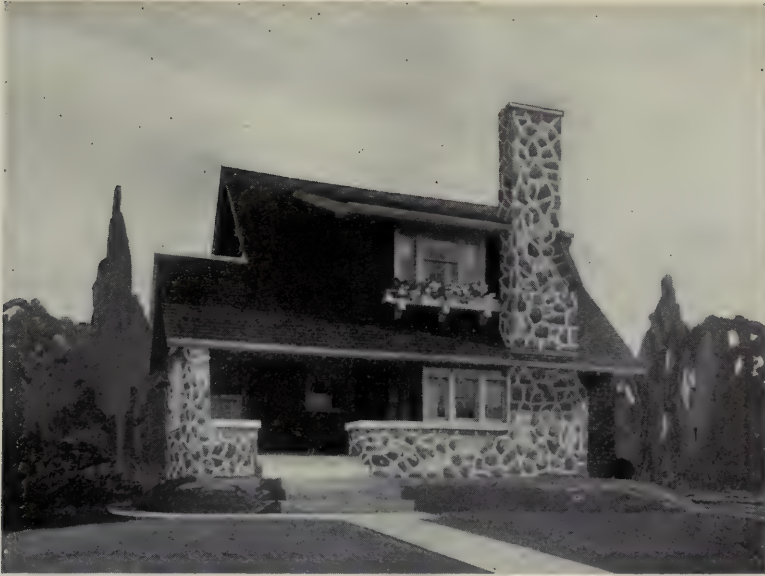
On the second floor are three extra large chambers, a bath and a small den. The closets too are unusually large. On the rear over the first floor entry is a sleeping-porch large enough to accommodate three single beds without crowding.

The basement is complete with laundry, hot water heating plant, etc.

The finish for the first floor is red oak with red oak floors. The second floor is finished in pine with yellow pine floors, same finish throughout. Estimated cost complete, \$4,800.

Design B461

The floor plan of this residence is rather unusual—the large livingroom occupies the whole side, with large open fireplace in the center. The diningroom directly back of the entrance hall is separated from it and the livingroom by sliding doors. The combination stair case to the left gives access to the second floor from

*John Henry Newson, Architect.*

DESIGN B 457

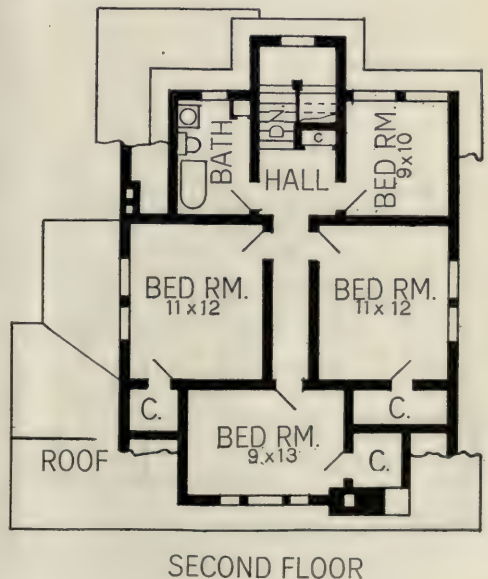
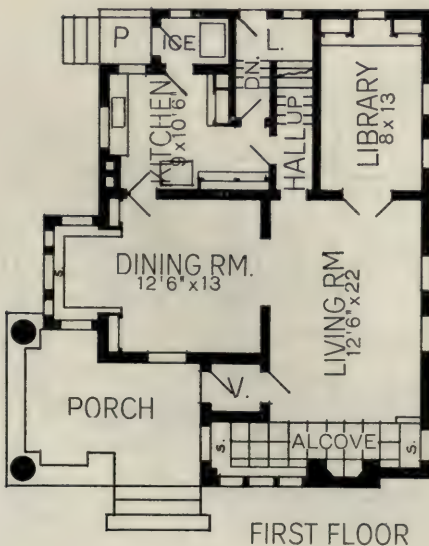
A Cobble-Stone Treatment

the hall or through the pantry from the kitchen. A grade door shows on the elevation with stairs to the basement leading down underneath the main stairs.

On the second floor beside the large owner's chamber over the livingroom has an open fireplace and there are three

chambers and a bath all with good closet space. A door leads from the bath out on a rear balcony, very convenient for airing bedding. This could be enlarged and a roof provided giving an ideal sleeping-porch at very little extra cost.

There is a full basement with laundry,





Chas. S. Sedgwick, Architect.

DESIGN B 458

A Half-Timber Design

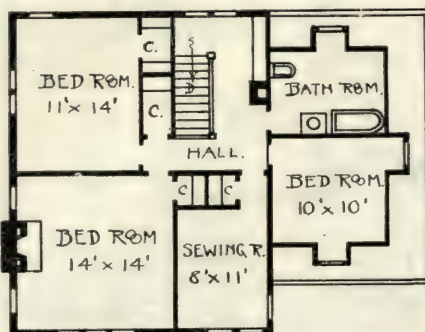
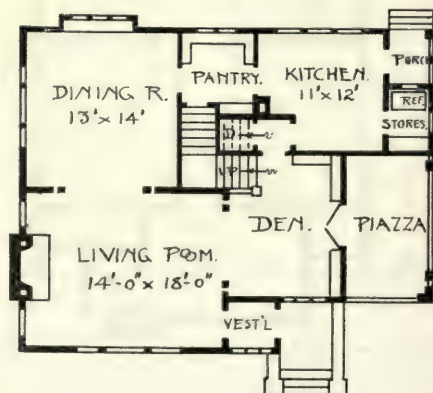
furnace room, storage, fuel and vegetable bins, with a hot water heating plant.

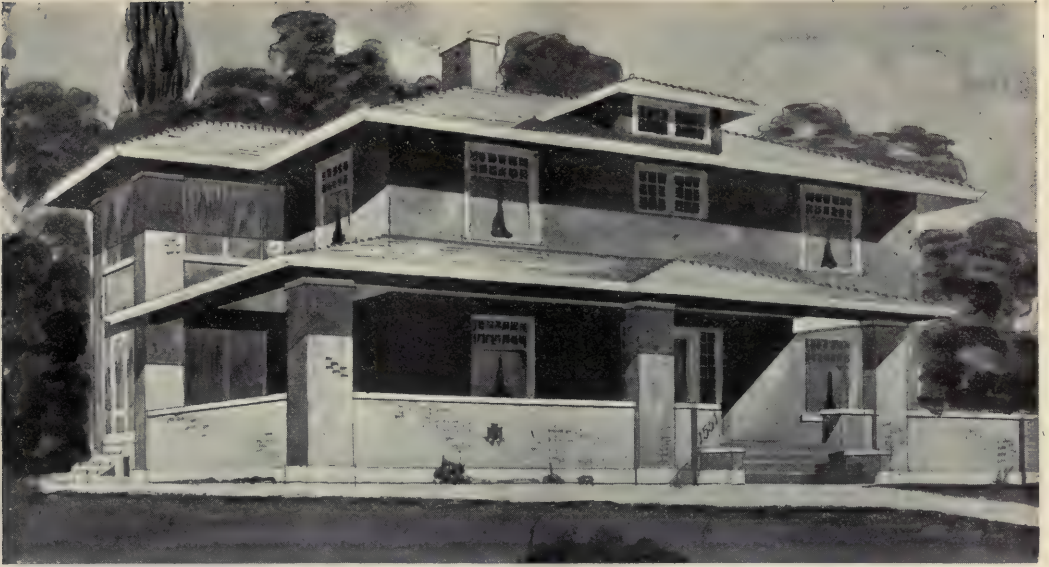
There is a good attic where a couple of servant's rooms might be finished off. The exterior is of narrow siding for the first floor with shingles on the walls above and on the roof.

In the attractive color scheme used for this exterior, the first story siding was light buff. The second story shingles were dark brown. The roof shingles were

bronze green. The trim throughout was white light buff.

The floors and finish for the first floor except kitchen are white quartered oak. The kitchen and the entire second floor are in birch with birch floors. Third floor in pine finished natural. The foundation walls are of concrete with a coat of cement "rough cast" above grade and cement floor for the porch. Estimated cost complete, \$8,000.





DESIGN B 459

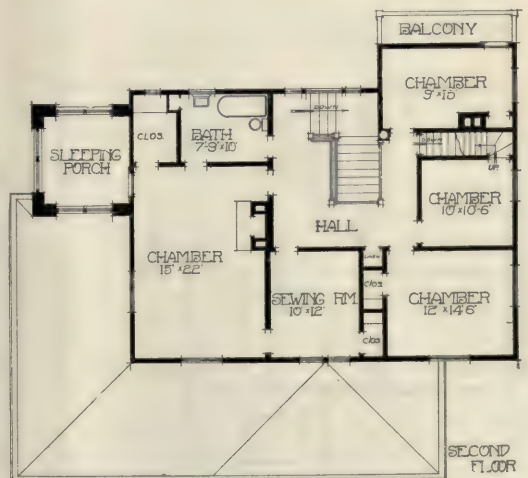
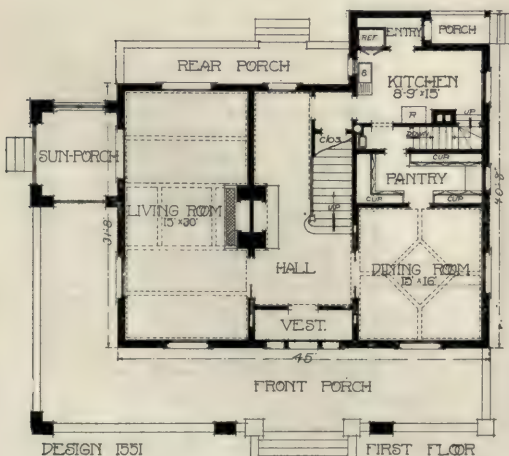
Designed on the Popular Low Lines

Design B462

In this design we have an attractive semi-bungalow, the walls of the first story being a brick veneer and the second story rough cast cement over frame with one-half timbers in the gables. The foundation walls are of concrete with a cement watertable at grade, cement floor for porch steps and coping and a slate roof,

which give it a very substantial look and a feeling that the house has been well constructed. This fact is further emphasized when we are told that the architect was the contractor as well as the owner.

The entrance hall and livingroom take up the entire front. The living and diningrooms are both good size and artistic, the livingroom having an open fireplace,



*F. E. Colby, Architect.*

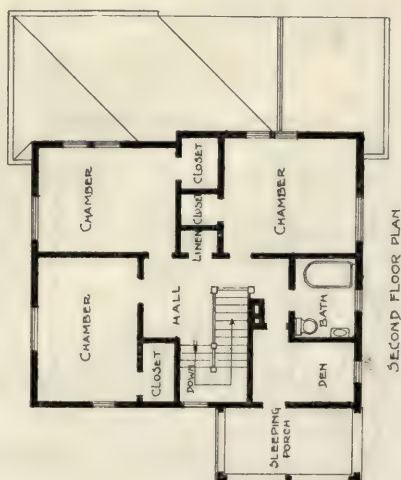
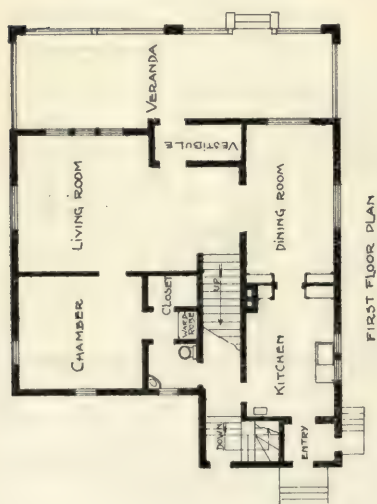
DESIGN B 460

Combination Brick and Paneled Plaster

plain square columns between it and the diningroom and hall; it has beamed ceiling. Beside the kitchen and rear entry there is a little "den" with built-in seat

and large closet, a large bedroom with two closets and a bath on the first floor.

The second floor has two large chambers with an additional bath.





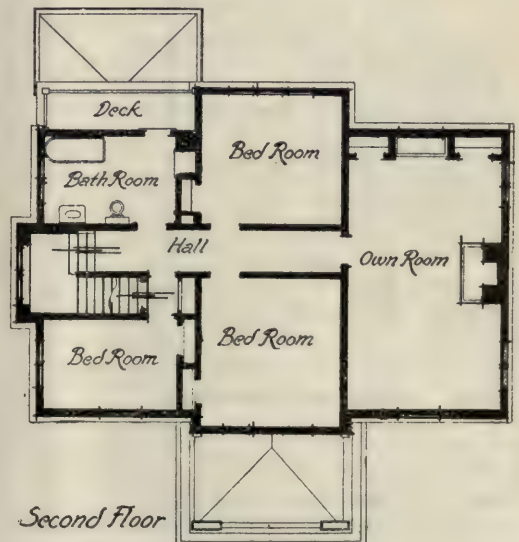
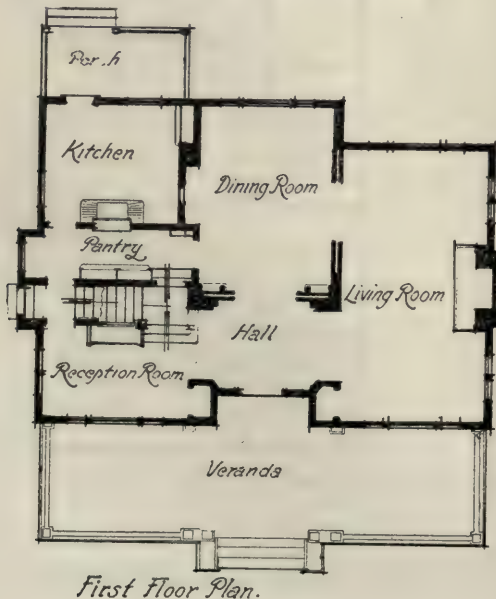
DESIGN B 461

Courtesy of Lowe Bros. Co.

An Attractive Design in Wood Construction

The basement is very complete with laundry, storage, vegetable room, furnace room, and fuel bins, with a steam heating plant.

The interior is finished as follows: The reception hall, living and diningrooms are in plain oak, den in red gum, bedroom on the first floor poplar enameled white, with





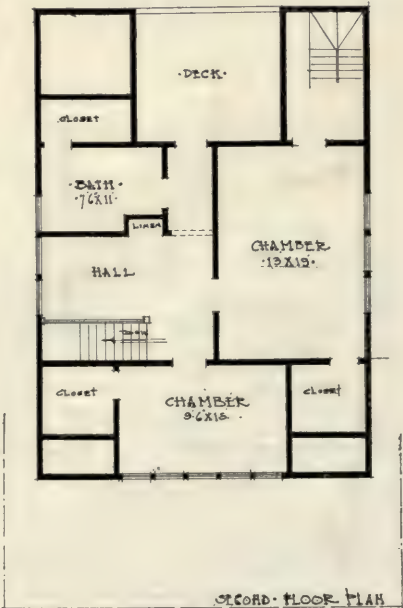
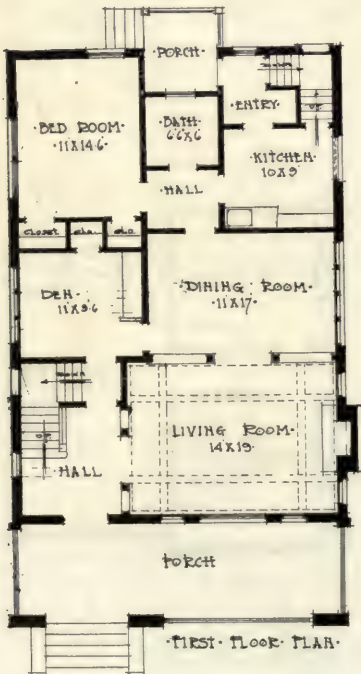
R. C. Powell, Architect.

DESIGN B 462

A Semi-Bungalow in Dayton, Ohio

birch doors stained mahogany; kitchen in pine stained, and the entire second floor in poplar enameled white. The exterior woodwork is rough chestnut stained brown.

Hardwood floors throughout. This residence was recently completed in Dayton, Ohio, and would cost to build complete, as described, \$6,500.



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The House with Plain Walls.

THE new house, with walls which cannot be permanently finished until they have settled, presents a good many problems, but it is no longer necessary to leave the walls absolutely white as was once done, nor is one restricted to mere tints. There are various preparations for tinting walls, all of which have a wide range of color. It is well, however, to choose medium shades, as very pronounced colors require a suggestion of texture which the tinted wall does not give.

As a rule, even in a large house, it is best to keep all the rooms on the ground floor in the same color, using different shades, while the bedrooms may have distinct color schemes, as they are isolated from each other.

From Brown to Yellow.

The color scheme which is most satisfactory, take it "by and large," is in tones of brown, beginning with a medium tone of golden brown, shading down to a golden tan, with possibly one room in clear, bright yellow. Yellow is a charming color for the walls of a dining room, in combination with white woodwork and blue china, while the slightly greenish yellow called citrine, is most effective with weathered green oak and china of positive colorings.

In choosing the tones for this scheme, it must be remembered that the cold browns and tans are not satisfactory in a cheap medium-like tint, and that there should be a good deal of yellow in those used.

Tones of Green.

Many people are so inveterately attached to green that it seems the only possible wall color, and there is certainly

a great charm in a succession of green rooms, deepening or lessening in tone, one after the other, with an olive gray for the lightest shade. You can use a more positive green with white woodwork than with that in brown tones, and a willow green is particularly good, affording an opportunity for the use of a cowslip yellow in the furnishings.

Blue, with White Woodwork.

Blue is always a difficult color to manage and rather more so in tint than in other surfaces. The wall paper in a medium blue may have its uses, but the tinted wall in the same tone is hideous. But with white woodwork, especially in a wainscoted room, a rather light and very gray blue is very good indeed. The best guide I know to the use of blues of this sort is a sheet of blue gray charcoal paper, such as is used for the binding of many of the Mosher books. Or you may aim at a tone half way between the decoration and the ground tints of blue Canton china.

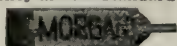
But at its best blue is the color rather for a single room than for a series. It rather insists upon sunshine, except in southern latitudes, and everything in the room must be subordinated to its demands, while it combines with very few other colors. And yet, just because its uses are so few, a really good blue scheme is very good indeed.

In this connection mention must be made of what is the simplest expedient of all, leaving the plaster in its original state, without the final white coat, what is known as rough cast. The soft, gray is very pleasing if the woodwork is dark and the cost is much less than that of tinted walls, though some sort of treatment is required before the rooms can



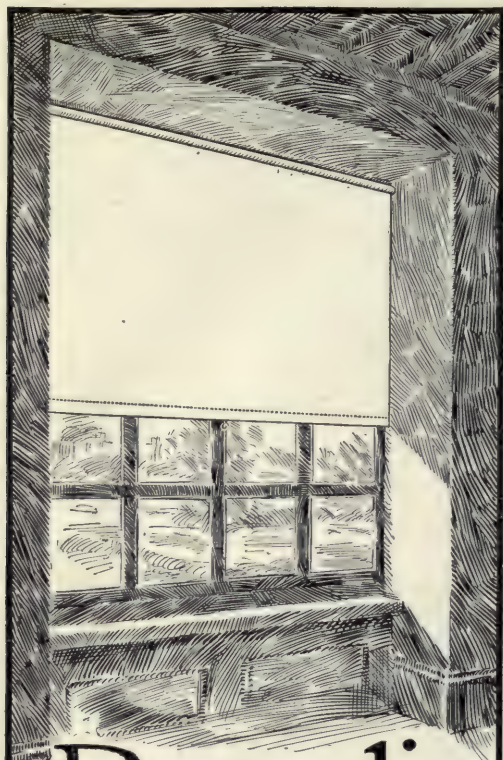
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DECORATION AND FURNISHING—Continued

be papered. The objection to it is that it seems rather out of harmony with finely finished woodwork, or with the better sorts of furniture.

The same sort of gray can be used in tint for the rooms of a lower floor, but a good deal of positive color is needed to redeem it from insignificance. It is an extremely good back-ground for the large patterned and bright colored cretonnes which are so much used for living rooms.

German Cane Furniture.

From Germany comes the woven wicker furniture inspired by the Secession movement, very finely woven, square in shape, of generous proportions and extremely strong. It is not particularly cheap, but costs less than the similar furniture turned out by artistic craftsmen in this country. It is usually in the natural finish, although it is sometimes painted white or gray. A very good arm chair costs twelve dollars, from which figure other prices can be inferred.



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“St. Lambert, Quebec.”

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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

A Barrel of Questions.

K. S. I am a subscriber to *Keith's Magazine* and have been reading your articles on "interior decoration," with the utmost interest, and now that we are about to build, would greatly appreciate suggestions from you.

Am enclosing sketch of floor plan and stamped envelope for your valued reply.

Our home is to be a bungalow, built on the bank of the river.

The woodwork in living room to be red birch, finished mahogany. In this room I shall use piano, music cabinet, fancy cabinet, rocker and morris chair, in mahogany finish. The two chairs to be re-upholstered; a couch and large rocker in black leather.

The table, necessary chairs, and rug will be new. What would you suggest for the new pieces? The fireplace to be of brick. Do you think "red brick" would clash with the mahogany? Would you use "grey brick," and would you have tile same color as brick? What color draperies would you use in this room, and what for window curtains? Living room southwest exposure.

Would you advise vestibule in mahogany finish? Floor in vestibule to be of tile. Would you use same tile in vestibule as in living room hearth?

Now, for the dining room. This, to me, is the most interesting room in the "bungalow," for the French doors open on to a porch, with a fine view of river and beautiful scenery across the river, from both porch and east end of dining room. I cannot think of any color scheme I would like to carry out in this room so well as "old blue," also introducing some old blue in living room.

I sincerely hope you will tell me that old blue is permissible, with this south-east exposure.

Dining room woodwork will be white oak. I have a large mirror in a black walnut frame. The mirror is too large to go in same bedroom with walnut dresser (which is a beauty) so thought I would have it taken from frame and "built in" either in dining room or back bedroom; which would you suggest? Would it be appropriate in dining room? It would be more of an ornament in dining than bed room, as it would be seen more in former room.

Ans.—You surely **have** "asked a barrel of questions," and it is impossible to reply to them all.

We are interested in your bungalow and your problem, but it is impossible to give details for so many rooms in this free service. In this letter we will try to cover the vital points.

First as to exterior, since there are no trees near, we should like the wall shingles stained grey with white trim and a green roof. As to finish of woodwork, we do not admire a mahogany finish in a cottage or bungalow, and we do not like the living and dining rooms with wide opening between, as you suggest. The piano and cabinets appear to be the only mahogany pieces that are prominent, the other pieces being mostly upholstery. We should use a brown finish on the living room, birch, as birch is extremely pretty with a brown stain and the wood itself being slightly reddish, brings it more into harmony with mahogany. The brown flemish in the dining room will then not be amiss. Were it our dining room, however, we should have the wood trim ivory with brown doors and the small cap molding at the top of the baseboard stained brown. Your French doors would then have white sash, as they should, and the casement windows. Even if your walls are all plain, in this room at

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ANSWERS TO QUESTIONS—Continued

least you should use a decorative wall. There is a perfect paper for it, grey foliage with lovely blues and greens mixed through it and hints of brown, on a light grey ground. Have a low wainscoat effect, either the ivory wood paneled, or an 18-inch strip of burlap run above the baseboard with a four-inch wood strip above it, and paint the whole ivory white. Then this paper to the ceiling angle. Then your plain soft, but rich blue rug and lighter blue Sun-fast draperies at the sides of the casements. Your dark flemish furniture against this setting will be beautiful, and with the river view, the whole thing enchanting. Do not spoil such an opportunity.

To carry the blue rugs into the living room would be admirable; then add two or three wicker chairs upholstered in blue velour or an imported English cretonne which comes in blues and some brown, just exactly made for the place. The fireplace brick, grey surely, and hearth of the same. The wall a soft grey. The vestibule woodwork must be same as living room. The floors stained brown. We should not like the bookcase in dining room, but with this plan it will go in living room all right.

Now about bedrooms and walnut. Never "throw out" the walnut dresser; such things are precious. Fit your room to it. We should advise placing it in the north room, however, and by all means the walnut framed mirror with it. Is the mirror too large for that space between the windows? If so, cut down both mirror and frame to fit there. The brass bed head against the east wall and the dresser against the west wall. Or, put the dresser between the windows and take the mirror out of frame and cut down to use on one of the doors as a dressing mirror. The walls of this room should be soft grey flowered chintz, with gay chintz covers on chairs, etc.

We prefer a dull finish for bungalow woodwork.

A Remodeled Interior.

M. N. N.—I enclose photo and floor plan of an eight-room house and would be pleased to have your suggestions in wall decoration, rugs, curtains, draperies, furniture, etc.

The walls have never been papered, as the house is practically new.

There is a hardwood finish throughout (black ash), varnished. Floors are also hardwood, stained a very light brown and waxed.

You will notice, in living room, the radiator extends full length of window; would like a seat placed over this if you thought advisable.

The dining room was formerly used as a kitchen, and walls were painted a light green.

There are no fireplaces, but we propose having two put in this fall; in which rooms would you suggest having them placed?

All the furniture we have at present consists of a black cased piano, dark quarter cut oak hall seat and mirror, a quarter cut oak revolving library table, and oak morris chair, upholstered in green velvet.

We do not wish to purchase anything more until we receive your suggestions.

Ans.—Our first suggestion in the remodeling of your house is to take out the partition between parlor and living room and make one large room. This will enable you to place one large fireplace where it belongs, in the center of this big room. All new houses now have such a living room from 20 to 30 feet long and dispense with a parlor.

The location of your pantry seems very poor. Can that be changed? The dining room at present is rather narrow to put in a fireplace, though a fireplace in the dining room is always delightful. Cannot you take out that pantry and make an arrangement of cupboards between dining room and kitchen, opening through slide into both rooms? We suppose the radiator you speak of must be back under the window in bay and not out in the room as you have drawn it. It is difficult to manage a seat over it unless the radiator is a very low one, as the board and the cushion make it too high for a seat and also interfere with the radiator. It could be enclosed by an ornamental perforated wood casing.

The dining room walls can be either repainted or papered without removing the old paint. Green is a poor color for a northwest room. With your ash woodwork we should run a general scheme of



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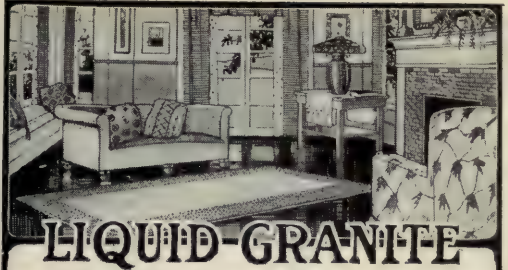
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grey wall tones through these rooms, varying tones, plain in living room, grey and old rose in dining room and grey blue and dull red tapestry in hall. An oriental rug in soft old rose reds would be beautiful in the hall, or, if not that, a mulberry red Saxony. It would probably be best to get two 9x12 rugs for the big room, and these we would have in Saxony or Wilton in soft plain green, not grassy nor dark. The west wall of the big room would be the place for a couch or davenport, upholstered in either green velvet or a small figured English tapestry in green. The morris chair is good and should be supplemented by a fireside chair in brown wicker upholstered in rich colored cretonne. The piano could go against the north wall, but the revolving table we see no place for. For the furniture in the front end of the room we would have a pretty open writing desk, a reading table rather long and narrow in the center of the big room, in front of the fireplace a wicker chair or two upholstered in green velvet, and a wicker table in the bay for plant.



*Residence of Alfred Dupont, Wilmington, Del.
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BUILDING PAPERS

are good enough for the best houses, low priced enough for the most modest. Everyone willingly pays the slight difference in cost over rosin sized, say, \$10.00 when told why. We will be glad to tell you all about it if you are interested enough to ask.



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Before you build, write for our free BUNGALOW BOOK containing beautiful, practical and up-to-date designs and miniature floor plans, cost to build and suggestions for building true and modified types of Pacific Coast Bungalows and two-story residences.

This book also tells how to build "from crest to foundation" with Red Cedar Shingles, for less money, how to make new shingles last an average life-time, and how to save frequent paintings.

We have no plans or books to sell, but manufacture Washington Red Cedar Shingles and want you to know about their durability, beauty and utility as an exterior finish.
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The Mystery of French Cooking.

 HE average housekeeper thinks that a French dish is necessarily something very complicated and quite beyond her.

Here she is mistaken, some French cookery is extremely elaborate and expensive, but not all of it by any means. I think the trouble is that the state of its processes in cook books is often very complex. Try analyzing one of these elaborate recipes, and when you have got it down to essentials you will find it no more complicated than those in our native manuals. French cooking is a matter of seasonings and sauces and of accurate processes, but its elements are very simple.

Bouillabaisse.

At present this is the popular dish in the fashionable New York restaurants. In its original estate it is a thick soup, peculiar to the south of France, whose principal ingredient is cray fish, but it can be successfully imitated with other sorts of fish. Recent cook books contain recipes for it, of more or less elaboration, and it is worth trying by families which like highly seasoned food. Readers of Thackeray's famous ballad will remember that one of its charms was that it was served smoking hot.

The Problem of the Sunday Dinner.

The whole matter of the Sunday dinner is one of those questions in which tradition and necessity have become confused. It is necessary to have a dinner on Sunday. It is not necessary to have it at a particular time or to have a particular sort of a dinner. It is not worth

while to make sacrifices to maintain the neighborhood standard. Besides singularity sometimes has its reward. When all your neighbors are buying roast beef the best chops and steaks are yours for the asking.

Some housewives solve the Sunday dinner problem by going to church at eight o'clock and having the morning free for roasting and baking. Others, of a different faith, fail of this resource and must forego morning services or dispense with the traditional midday dinner. Why Sunday should be sacred to the noon dinner is not evident but it is, and an afternoon devoted to digestion is part of the day's routine. Still it does seem rather material to sacrifice so much to mere feeding, nor is it necessary. It is quite possible to have an extremely good hot meal at one o'clock or a little later, whose actual cooking shall not require more than half an hour. Naturally it will not be a roast, although a loin of veal, a leg of pork or a pair of chickens can be roasted on Saturday and set away in the dripping pan and when given half an hour in a hot oven be just as good as if the process had not been interrupted. But a steak needs but little time and is quite as good as roast beef, while loin chops are much better than the average roast of lamb.

If potatoes are boiled for about twenty minutes, with their jackets on, they will bake in a hot oven in less than half an hour. Or cold boiled potatoes can be browned in the pan when a roast is heated over, as just suggested. With chops or steak the frying of potatoes in deep fat is a matter of a very few minutes. Spaghetti with cheese or tomato sauce is

There is no "heavy cleaning" in this house

No weekly visitations from the cleaning woman, no shaking and beating of rugs or upheaval of the domestic serenity is necessary in the little home shown in this picture or in the thousands of other homes, little and great, which are equipped with the

TUEC STATIONARY VACUUM CLEANER

These houses are always clean and the cost of keeping them so is trifling as compared with the cost of servants. At the turning of an electric switch, as easily accessible as the switch that lights your chandeliers, the powerful TUEC machine, which is out of sight and hearing in the basement, begins to operate. Silently, but irresistibly every particle of dirt from floors and floor coverings, from upholstered furniture, bedding, tapestries and hangings is taken out of the house. It brightens the wall paper and cleans out the registers and radiators, making the entire home sweet, clean and wholesome.

By exhausting the polluted atmosphere with its



germs entirely outside the house the TUEC prevents disease. This is one reason why it has been so universally adopted for use in hospitals as well as in homes.

TUEC service is easily within the means of every home owner. It saves enough in wages of help and in wear and tear on household furnishings to more than pay for itself. It never becomes clogged—(TUEC piping is never less than 2½ inches) and is so simple that it cannot get out of order. It can be installed at any time.

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THE Detroit Combination Gas Machine provides the home with a Satisfactory Gas Supply:

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Perfectly safe—not a drop of gasoline enters the building. On the market over 44 years. More than 20,000 in daily use. Our catalog will interest you. Write today for copy and names of users in your vicinity.



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The book shows how we avoid waste space and combine beautiful effects with economical construction. Don't think of building without seeing it. To the man who intends to build, this book is most valuable. It shows the best of the new thoughts on Cozy Homes, Quaint Bungalows, Picturesque Cottages, Seaside Residences. Price \$1.00 by mail, postpaid.

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Glass always pays—for it makes its own weather

It admits the sunlight and holds it to its work in spite of zero outside. It insures early and profitable crops. Even the old style single layer sash pay, but do not compare with

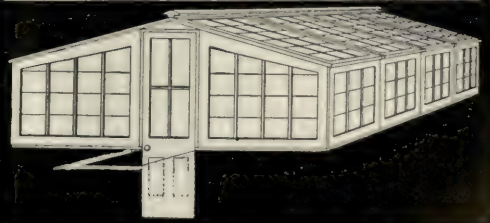


These are complete in themselves, eliminating mats and shutters, labor and all; keeping the plants growing by conserving the heat day and night; making crops early and doubling profits.

The Sunlight Double Glass Sash idea is carried into the Sunlight Greenhouse—a small and inexpensive structure. It is 11 ft. x 12 ft. in size and the roof and two sides are covered with the Sunlight Double Glass Sash. It is quickly and cheaply heated. The sash are readily removable and in the Spring may be used on cold-frames and hot-beds. The framework is made in sections, easily put together.

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Sunlight Double Glass Sash Co.
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"The Building Of It"

A Practical Handbook on Construction Details, \$1.
M. L. KEITH, McKnight Building, MINNEAPOLIS

HOUSEHOLD ECONOMICS—Continued



The Pfau Bungalow Toilet Combines Utility with Beauty

It solves one of the most difficult problems of the little house by eliminating the noises of rushing water and whistling valves that so frequently make the toilet a source of endless embarrassment. It is small but very efficient, doing its work swiftly and with sanitary thoroughness. It is very beautiful.

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PFAU White-Copper TANK

Though small it is the most powerful flushing tank ever assembled and it is guaranteed to flush out any water closet bowl of any size or type.

Built throughout of pure lake copper, beautifully finished with a chemical surfacer that is snowy white (or rich mahogany if you prefer), it is exquisite in detail, staunch in construction and calculated to give a life-time of satisfaction.

Write today for the Pfau Booklet and for Plates showing the Pfau White-Copper Tank in connection with various styles of water closet bowls.

THE PFAU MANUFACTURING CO.

Mentor and Huston Sts., Cincinnati, Ohio.

World's Largest Manufacturers of Toilet Tanks and Seats.

a good substitute for potatoes, the browning stage only needing a few minutes.

Any of the green vegetables can be boiled the day before, drained into a small saucepan and reheated with a little hot water and a good lump of butter. Cauliflower or onions boiled the day before can have their cream sauce made the next morning and be brought to the boiling point in time for serving, while those vegetables which require long cooking can safely simmer or steam for several hours, while the housewife is at church.

Using Green Peppers.

At this season green peppers can be bought very cheaply by the basket and are a pleasant addition to the variety of the table. The sweet peppers are the ones used and the seeds must be removed. Before stuffing peppers they should be boiled in salted water, and almost anything may be used for a filling. They are a good vehicle for a meat or fish salad, or they can be filled with a force meat and baked.

Finely shaved peppers are a good addition to almost any salad, and a particularly good sandwich is made from any sort of coarse flour bread, well buttered and with a filling of shaved peppers over which a little olive oil has been dripped.

Peppers are also very good when fried in olive oil and served with beefsteak. They may be mixed with onions and piled around the steak in a casserole and left closely covered to mellow.



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It tells all about the proper method of finishing floors and interior woodwork, and improving furniture. A big help in beautifying the home—new or old.

Johnson's Wood Dye

Comes in 17 harmonious and natural shades. Makes cheap, soft woods as artistic as hard woods.

If you are interested in building we will mail you free a Dollar Portfolio of Wood Panels, showing all popular woods finished with Johnson's Wood Finishes. Remember—the Panels and the 25c book Edition K. E. 11, are Free and Postpaid.

Take this ad to your dealer—or write

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"The Wood Finishing Authorities"

TIGHT!

IF YOU would take a glass bottle, put a glass stopper in it and then melt the glass top and the stopper together, so it would be like one solid piece of glass, you would have a vessel that would be *tight*.

What would you think of a *steel furnace* made just as tight as that; one that had the joints *all melted together* like the glass in the bottle without any riveted or bolted seams, or slip joints, or sand joints, such as you find in ordinary furnaces, and which have given cause for putting furnaces in a class by themselves as dusty and dirty? Well, the **HESS FURNACE** is built that way; the steel plates forming the body of the furnace are clamped together and are then *melted* in that position so that they fuse together and become *like one solid piece of steel*. No leakage there, *never, never*. Expansion and contraction won't open these joints, and gas and dust never will get out.

It is a wonder too, how long a furnace made that way will hold the fire; with wood or hard or soft coal or slack, or even rubbish. You can shut it up tight and the fire will just hold there for hours and hours,—for fire will not burn without air, and if air doesn't leak in there will be very little combustion. That saves fuel.

Our space here is limited, and we can't tell you much more about the *Hess Furnace* here, but we have a 48-page booklet which tells you *more* about it, and if you are interested just ask us for one, and it will come to you, free.

We sell our furnaces *direct from factory to consumer*. The price is less than dealers charge and the service is better than any dealer can give. Send us a rough sketch of a building you want heated, and we will send back a plan made by a draftsman, showing how it would be heated, with an estimate of cost. No charge for this, but it's worth money to you.

We sell *on trial*, too, so that your money doesn't get to us until you have tested the heater and are satisfied.

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White Steel Medicine Cabinets, also.

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FOUNDATION

COAL CHUTE



Q Protects the building just where most needed—above the opening

Q The heavy steel hopper catches all the coal.

Q When not in use, the hopper lies in the bottom of the chute body

Q The door locks automatically either open or closed. Strictly burglar-proof

Q With 1/2 inch wire glass or steel panel in door



Write for circular and address of nearest dealer.

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SAVE 30% to 50% ON YOUR FURNITURE

We build the complete "Come-Pack" line of high quality living, dining, bedroom and den furniture in sections, finished to your order—your choice of eight shades hand rubbed polish—and ship direct to you with full directions so that you can set up any piece right in your own home in just your spare time and save from 30 per cent to 50 per cent of what you would pay for common, old style furniture elsewhere.

A FULL YEAR'S TRIAL

Buy your furniture on the new plan—this new idea that has surprised the furniture world—get 100 per cent quality, because you see each piece in sections before they are assembled. Nothing can be covered up—you get actual quality.

Every piece of Come-Pack Furniture is of pure quarter-sawn **WHITE oak**—no red oak, or any other cheap grade of oak or imitation—it has the character that befits and distinguishes the home of quality. It is guaranteed—and sold upon a full year's free trial.

THIS IS AN EXAMPLE OF COME-PACK BARGAINS

This handsome table is Quarter-sawn White Oak, with rich, deep, natural markings; honestly made; beautifully finished to your order; shipped completely stained—your choice of eight shades—hand rubbed polished. Height, 30 inches; top, 44x28 inches, legs 2 1/2 inches square. Two drawers; choice of Old Brass or Wood Knobs. It comes to you in four sections, packed in a compact crate, shipped at knock-down rates—shipping weight 150 lbs.

With a screw-driver and just your spare time you have a table that would ordinarily sell for \$25.00!

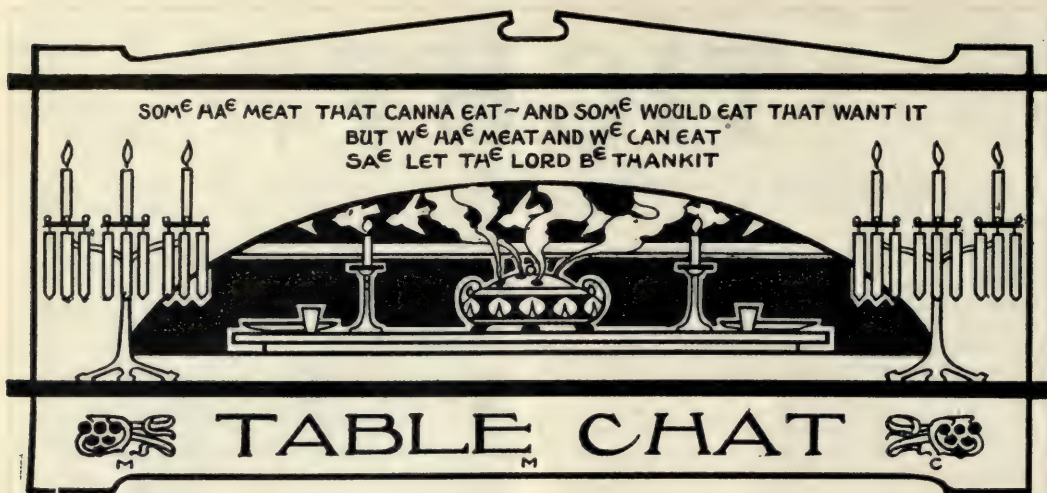
OUR FACTORY PRICE, shipped in finished sections, only \$11.75

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Our advance 1914 catalog is ready for distribution. It is the most beautiful furniture book ever given away—tells all the details—gives you a choice of over 400 pieces in living, dining, and bedroom furniture—color plates showing the exquisite finish and upholstery—factory prices. Write for this beautiful big book today, it is free, prepaid.

COME-PACK FURNITURE CO., 1156 Fernwood Ave., TOLEDO, O.



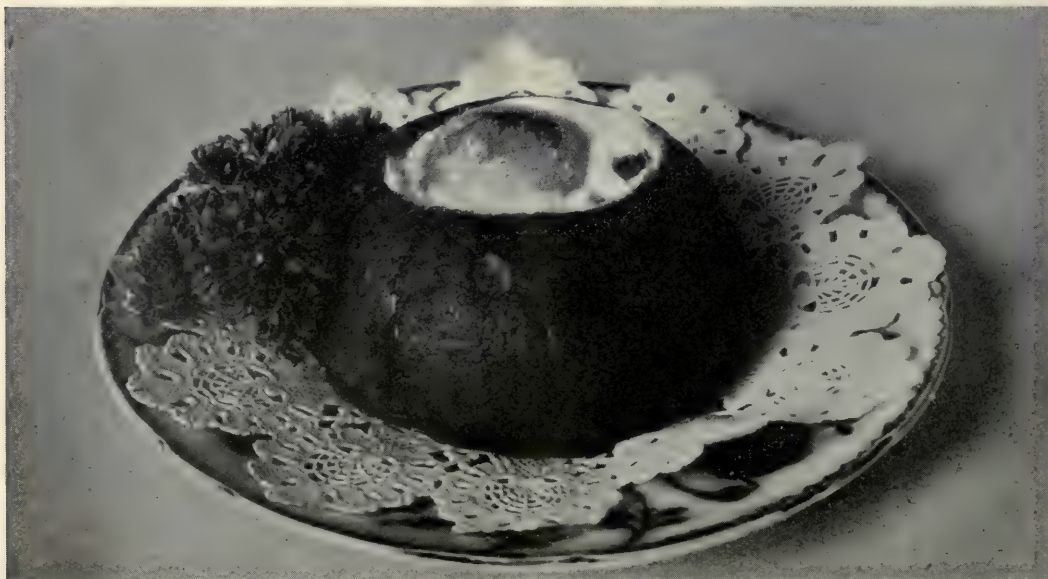


Greenery for the Winter Table

BY November nothing lingers outside in the north except a few hardy chrysanthemums. Now is the time to think of some permanent decoration for the table. The dishes of ferns sold by the florists are good for a month or more with ordinary treatment, after that are very scrubby. As they contain several varieties all do not thrive alike. It is better to have only one sort, two or three plants in one receptacle, and of them all, the holly fern

is the most satisfactory. With a weekly dose of some sort of plant food, it will gain steadily in size and beauty. Ferns do not require a high temperature and it is a good plan to set the fern dish into a cool room between meals, being sure that the temperature is not too low. Or it may be covered with a glass shade. Such are often found in attics and are more useful than when covering gilt clocks or wax flowers.

Failing ferns, ten cents' worth of plain



A DELICIOUS WAY TO SERVE SQUASH.



"Gaumer Lighting everywhere, follows the evening glow."

THERE is a Tag attached to every one of the genuine indoor



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GAUMER Hand Wrought Lighting Fixtures

that guarantees the lasting quality of the *FINISH* whether it be Bronze, Antique Brass or Copper, Old Silver or Hammered Swedish Iron.

That Guarantee Tag is your insurance against unnecessary expense of refinishing later on—Your dealer will attach the Guarantee Tag if you insist on it—it's yours by right.

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RIGHT TEMPERATURE IN THE HOME

Below Sixty While Asleep ~ Warm At Waking Time ~ Even All The Day.

IF YOU hired a man whose every hour and minute of the day was devoted to a constant watching of the thermometer and the regulating of the drafts to keep exactly the temperature desired, he couldn't render a service as satisfactory as can be obtained with

The "MINNEAPOLIS" HEAT REGULATOR

Worth many times its cost. Saves fuel—not a little but a lot, and surely ends the former round of continual attention. The "Minneapolis" is the "original" heat regulator—"The standard for over 30 years."

Two Styles of Clock Attachment

Model No. 60—8-Day Clock

Model No. 47—1-Day Clock

The clock attachment enables one to secure automatically and silently a change of temperature at any set hour.

Used with any heating plant. Sold and installed by the heating trade everywhere under a positive guarantee of satisfaction.

Write for booklet. Shows all models, explains details and gives prices.

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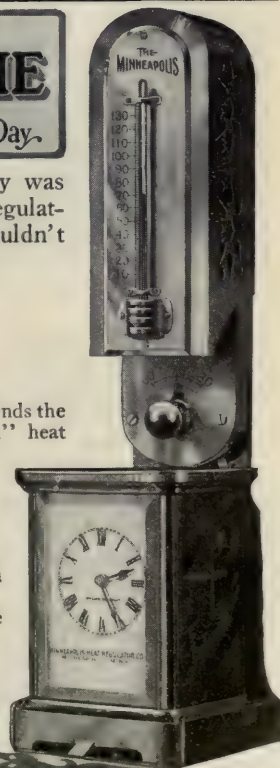


TABLE CHAT—Continued

green tradescantia, our old friend Wandering Jew, will give a bit of out-of-doors for the winter. It looks best in a tall glass, with plenty of room for the tiny roots which they throw out in water. Dead leaves should be removed and the water changed at least once a week, and a few drops of ammonia occasionally help. The striped varieties will grow in water but less luxuriantly. Another water growing plant is German ivy, *Senecio scandens*. This is less common than it

nieres for table use. Its sides are open-work of some sort, latticed or spindled, and there are receptacles of many different shapes and sizes. They can be had in sets of three or four so curved that when they are put together they form a ring around the centre of the table. Others are square or long and narrow, and some of them have some decoration of a French looking pink. Their general appearance suggests the Adam style when carried out in white.



INDIVIDUAL OYSTER PIE.

used to be, but can be found and is very beautiful with its profusion of light green leaves, and its rapid growth.

One of the small leaved varieties of begonia with its branches nipped at the top to prevent them from growing too tall, is a very good table centre, especially when it is covered with pale pink or coral tinted flowers. A bulb of one of the pink varieties of oxalis, planted in one of the Japanese flower pots, blue and white with perforated sides, is easy and effective.

Coburg Ware.

This is a white, or rather ivory, faience, made in Germany, especially for jardi-

Rather less expensive and far more effective are the small boxes and jardinieres of Italian terra cotta in deep cream and ivory tones, many of them with classic figures in relief, and very kind indeed to the plants within them. Within the last year or two it is possible to find a large variety of them in the department stores, and they are well worth having.

For the Table at Which Three Sit.

With a circular table, occupied by three people, there is generally neither head nor foot, or else there is a vacant space at one side. For this condition the Coburg ferneries which are sections of a

Sanitary Bedrooms.

We can learn much from the English and the Germans in home sanitation. Their furnishings are selected to facilitate frequent cleaning. Linoleum, the most sanitary floor covering, is found in nearly all rooms, including the bedrooms. In considering this matter for your own home, remember that you can secure patterns with all the dignity and beauty of hard wood in

WILD'S PARQUET INLAID LINOLEUM

"WILD'S for WEAR"

It is more desirable than wood parquetry as it is practically noiseless and non-inflammable; is not slippery; never needs "doing over;" is less expensive and more sanitary.



Not only can it be easily cleaned with soap and water, but it has a bactericidal property, due to the presence of linseed oil. This is a permanent flooring that is never ordered up by a physician like unsanitary carpets nor taken up to clean. We say "permanent" advisedly as the patterns are *inlaid* (colors through to the back) and wear for years.

Remember, "WILD'S for WEAR." This make is the "original American linoleum," long famous for its remarkable durability.

Sold by most furniture, house furnishing and department stores. The trade mark stamped on the back is your guide and guarantee.

Send for folder "L" showing these wood patterns in colors, a small sample, and the names of dealers in your locality who carry this linoleum.

JOSEPH WILD & Co.

WHOLESALE DISTRIBUTORS

366 FIFTH AVENUE, NEW YORK

BOSTON

Est. 1852

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HESS MEDICINE SANITARY LOCKER



The Recessed Steel Medicine Cabinet

The Only Modern, Sanitary STEEL Medicine Cabinet

orlocker finished in snow-white, baked everlasting enamel, inside and out. Beautiful beveled mirror door. Nickel plate brass trimmings. Steel or glass shelves.

Costs Less Than Wood

Never warps, shrinks, nor swells. Dust and vermin proof, easily cleaned.

Should Be In Every Bath Room

Four styles—four sizes. To recess in wall or to hang outside. Send for illustrated circular.

HESS, 917 L Tacoma Bldg., Chicago
Makers of Steel Furnaces. Free Booklet.

You can see at a glance some of the reasons why.

CREX
Grass Furniture
TRADE MARK

is preferred to any other styles or makes. Time will prove to you the other reasons.

Ask your dealer for CREX.

New Booklet, No. 307, Artistic home furnishings, sent free, on request.

Prairie Grass Furniture Co.

Sole Manufacturers

Glendale, Long Island, New York

THEY SAY—

LIFE is just one darned thing after another!

LOVE is just one darned fool after another!

RACE-SUICIDE is the crime of the time and yet we keep on building school-houses and homes. By the way are you thinking of



Building a Home? Let Us Help You

Is it to be an attractive, artistic home? Are you including all the built-in conveniences which we have devised to make housekeeping and home-making a pleasure? Your carpenter can do all if you have our plans and details.

New edition "BUNGALOWCRAFT" just ready. 128 profusely illustrated pages showing artistic and convenient bungalows (running mostly from \$1,000 to \$2,500) inside and out. \$1.00 postpaid. Smaller book showing 38 smaller Bungalow Homes, inside and out, 25 cents postpaid.

THE BUNGALOWCRAFT CO.

507 Chamber of Commerce

Los Angeles, Cal.

TABLE CHAT—Continued

double circle are useful, filling in the vacant space and leaving the centre of the table free. Naturally this arrangement is suited only to the small table and to the family of only one head.

A Maidless Thanksgiving Dinner.

Here is a menu for the house without a servant, which can be prepared some hours in advance, with the exception of the turkey: Oysters on the half shell, roast turkey, cranberry jelly, squash served in shell, creamed onions, lettuce, mayonnaise dressing, olives, cheese and crackers, individual pumpkin pies, fruit, nuts, coffee.

This is a dinner easy to get and to serve, and almost everything can be done the day before, except the reheating of the onions and squash, the browning of the sweet potatoes and the actual roasting of the turkey. As there are no Irish potatoes the gravy need not be made until the turkey is served the second time. The squash is prepared for cooking by cutting a slice off the pointed end, removing the seeds and steaming it until it is very tender and can be scooped out, leaving just enough adhering to the shell to make it keep its shape. Beat the pulp smooth with pepper, salt, butter and a little cream and replace it in the shell, setting it in the steamer for half an hour before serving. Serve it on a plate with a lace paper doyley under it and a bunch of the white stalks of celery beside it. A yellow squash is rather prettier than a green one for the purpose, but the flavor and texture of the green are better.

The individual oyster pie illustrated may be served instead of raw oysters for the first course. The cheese crackers are sunshine biscuits divided and spread with a paste of butter and grated cheese,

set in the oven until they harden. The pumpkin pie filling may be made with the yolks of the eggs, the whites kept for a meringue. Serve the coffee and fruit in the living room.

The Making of a Good Croquette.

Anyone can make hash but it takes skill to make a croquette, crisp on the outside and creamy inside. Yet the perfect croquette is really quite an economical affair, not needing the eggs which are so often prescribed and which serve no useful purpose. Croquettes are perhaps the most satisfactory of all ways of using up left-overs of meat, as they need not be all of one sort. A lamb chop, a bit of veal cutlet, one or two sausages and the tough end of the porterhouse can be chopped into a harmonious and savory whole, the only care needed being to remove all the gristle. If it is necessary to piece out the amount, a slice of well buttered bread, soaked in milk and mashed smooth with a spoon answers and some people use a little rice.

The trick is in the mixing and making. Cook together a spoonful of butter and a spoonful of flour till they are quite smooth; add by degrees a quarter of a pint of good milk, or use half stock and half cream. This is enough for a large cupful of chopped meat. Mix meat and sauce thoroughly together, season with pepper and salt and a little onion juice, pack the mixture into a soup plate and set it away to get thoroughly cold. Make it into cylinders or cones, using a mould if you have one, dip in beaten eggs and cracker crumbs and fry in deep fat. The longer the finished croquettes stand before being fried the better they will keep their shape.



A "NEW WAY" HOME

Designed with space saving sanitary Wardrobe instead of dusty lost space closets.

Build Your Home the "New Way"

10% larger Bedrooms—50% larger wardrobe capacity and you can save from \$100 to \$300 in building a Home with "NEW WAY" Wardrobes built in flush instead of the old-fashioned, cob-webby, dusty closets.

A home planned and built with these new space saving, sanitary and convenient wardrobes will be more comfortable to live in and much easier to rent or sell than if built with the old-fashioned dusty closets. Send 50c now before you forget it for our "NEW WAY" Home Plan Book, which shows 22 designs for homes, ranging in price from \$1200. to \$12000. all of which are planned with these "NEW WAY" wardrobes.

JOHN THOMAS BATTS

Room 612 Architectural Dept., Grand Rapids, Mich.



Wardrobe in an Alcove Dressing Room—Garments extended.

The Opening Door




Will swing softly on
STANLEY'S
BALL BEARING HINGES
 with Non-Rising Pins

Write for Booklet "Properly Hung Doors"

Dept. "T"
The Stanley Works
 New Britain, Conn.

S.W. S.W.

BUY YOUR FURNACE \$10 DOWN \$10 A MONTH



This No. 1 Jahant Down-Draft Furnace weighs over 1000 lbs., as it stands \$48.00 each, delivered east of Omaha and north of Ohio River.

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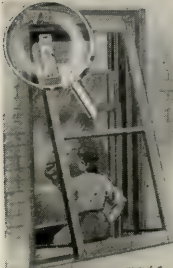
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Oak Flooring

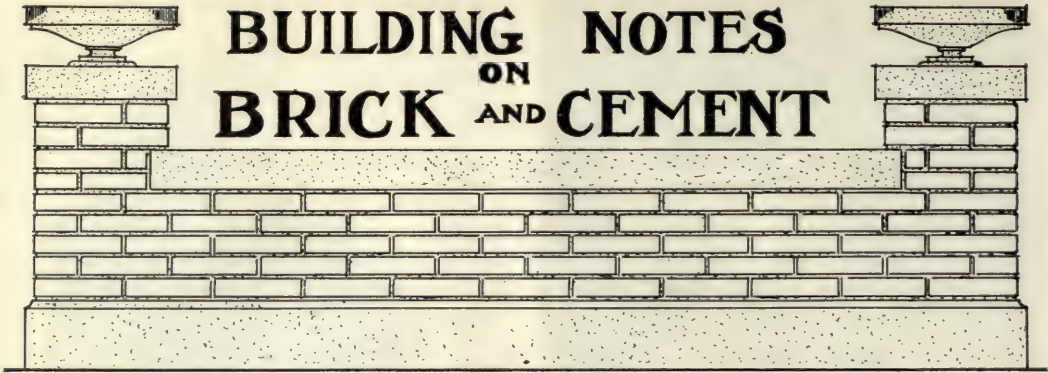
"AMERICA'S BEST FLOORING"

- OWNERS and BUILDERS find it a clinching argument to say "It's Floored with OAK FLOORING." It means that the tenant or buyer will be glad to pay 10 to 15 per cent more. In color, it is rich and cheerful, and imparts an air of refinement and elegance to a home. It is the modern flooring.
- OAK FLOORING $\frac{3}{4}$ " thickness by $1\frac{1}{2}$ " or 2" face can be laid over old floors in old homes, or over cheap sub-floors in new homes at a very low cost. It is cheaper than carpets or Pine Flooring.
- OAK FLOORING laid forty years ago in public buildings, after very hard service, is still in good condition. For durability, OAK is the best.
- There is a solid satisfaction and lasting pleasure in the substantial and dignified appearance of OAK FLOORING.
- A carpenter or handy man can lay OAK FLOORING successfully. It is very profitable work for any carpenter.
- OAK FLOORING is made in seven different grades—representing different prices to fit the pocketbook or condition under which they are used. There is no limit to the uses of OAK FLOORING and the prices are such that there is one or more grades adaptable to every class of construction.

Write for booklet

The Oak Flooring Bureau

898 Hammond Bldg., Detroit, Mich.



THROUGHOUT eastern Massachusetts and more especially perhaps in the many attractive suburbs of Boston and vicinity, the stucco house has rapidly grown in popularity and number. A method of construction much in vogue is one which, while it does not vary materially from that used in building the ordinary frame cottage or bungalow, eliminates the use of the customary sheathing boards. Instead of the latter the metal lath is applied to the outside of the studding and plastered in the usual way, but before the lath for the interior is applied the exterior is back plastered between the studding. A number of houses of this nature have been erected during the past year at Kenberma, Mass., at a cost which is said not to have exceeded \$1,275 each. In doing the work Kno-burn Expanded Metal Lath was used on all the houses.

Waterproofing a concrete roof has been successfully accomplished by the use of $\frac{1}{2}$ -in. coating of mortar in the proportion of one to two, applied before the concrete had set and troweled smooth. A solution of 1 lb. of concentrated lye and 5 lb. of alum was made up with 2 gal. of water, and used by diluting one part of it with 30 parts of water. A mixture of 2 lb. of cement in a pint of this diluted solution was applied in two coats to the fresh mortar. A large reinforced concrete pipe was also waterproofed in much the same manner and has likewise remained tight for several years.

About Removing Frames.

As a guide to practice in concrete work, the following rules are suggested by "Building Age":

Wall in Mass Work: One to three

days or until the concrete will bear pressure of the thumb without indentation.

Thin Walls: In summer, two days; in cold weather, five days.

Column Forms: In summer, two days; cold weather, four days, provided girders are shored to prevent appreciable weight reaching columns.

Slabs up to 7-foot Span: In summer, six days; in cold weather, two weeks.

Beams and Girder Sides: In summer, six days; in cold weather, two weeks.

Beam and Girder Bottoms and Long Span Slabs: In summer, ten days or two weeks; in cold weather, three weeks to one month. Time to vary with the conditions.

Arches: If not small size, one week; large arches with heavy dead load, one month.

All these times are, of course, simply approximate, the exact time varying with the temperature and moisture of the air and the character of the construction. Even in summer, during a damp cloudy period, wall forms sometimes cannot be removed inside of five days, with other members in the same proportion. Occasionally, too, batches of concrete will set abnormally slow, either because of slow setting cement or impurities in the sand, and the foreman and inspector must watch very carefully to see that the forms are not removed too soon. Trial with a pick may help to determine the right time.

In removing forms, one large builder requires that a 20-penny spike driven into the concrete must double up before it has penetrated one inch.—Builder's Guide.



The Sales Value

of any house lies not only in its appearance, but also in the intrinsic value.

Whether you are building to sell or to occupy, makes no difference. You want to get the most for your money. There's always, in every industry, one product that gives a full measure of satisfaction.

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Locate the finest example of Stucco House Construction in your neighborhood and you will find a practical illustration of the surpassing value and enduring beauty of appearance of this method of exterior construction.

Were it possible for you to strip off the outer coating of cement or plaster you'd find the secret of its smoothness, freedom from cracks and permanency of beauty is due to the intelligent use of

Kno-Burn Expanded Metal Lath

There are any number of houses, large and small of this type in every locality. The best of them are overcoated directly on the studding, without the use of Furring or Sheathing—with our special "Kno-Fur" variety of "KNO-BURN" Metal Lath as the plaster base—thus insuring *permanency*.


This is true economy. It is the best insurance against unsatisfactory Stucco Construction. It is the only logical solution to the fire hazard problem. It is not cheap, but it is the best in the end for the simple reason that the use and mesh of "KNO-BURN"

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Construction details; material details; comparisons of cost, time-saving and permanency and such other information as every prospective home-builder wants to know before building or remodeling are all to be found within the covers of this practical book. Write for your copy today.

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 A mere post card request for booklet No. 655 will bring you this valuable data by return mail.



Hollow Tile With Brick.

Hollow tile construction seems to solve the problem for brick houses better than any other method. This form as most often employed consists of an exterior facing of outside brick (which is really a veneer) backed up with hollow tile. Here we have the principle of the solid wall (practically, so far as strength is concerned) combined with the advantages

of a hollow wall (so far as insulation goes). It has been found in many buildings that in localities not too far from the source of supply the cost of brick backed with hollow tile is slightly less than the cost of a solid brick wall. Brick veneer on hollow tile in most instances has been found less costly than hollow walls of brick. Really, there is no comparison between the permanency of the former as compared with the latter.

There are many methods of building brick veneer with hollow tile. Almost any kind of tile can be used, set on edge or flat-wise. The method which might be called best (as it is the culmination of many years of experimental brick veneer building) is the use of what are known as "bakup" blocks, laid flat-wise.

No inside furring is required on a brick veneer wall lined with hollow tile, as the tile are scored to receive the plaster. Tile being so dense no moisture can penetrate the wall.

In a fireproof house when brick veneer on tile is used holes in the tile are left, for bonding the cross partitions of tile. At the angles, tile are laid alternating, and the holes left in every other course are afterward blocked by tucking in bats slushed with mortar. Considering all things, brick-veneer-hollow-tile is a valuable acquisition to the family of building methods. It has already become "standard" in the offices of most architects and promises to increase the demand for brick houses, since it reverses the criticism of so many owners that "brick houses are damp."—*Building Progress.*



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JUST now, when you're thinking of building, figuring out how much to spend on the front and sides of the house, porches, pergola and interior, don't forget the roof.

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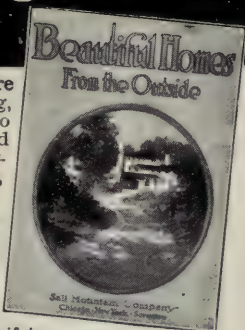
If you will send us your name, we will mail you a copy of our booklet "Beautiful Homes," which contains full-page illustrations in colors, showing the many attractive and pleasing effects of Sal-Mo Shingles. This booklet also tells what Sal-Mo Shingles are, how made, how little they cost and why you should decide in their favor. Send for "Beautiful Homes" before building. ADDRESS DEPT. H.

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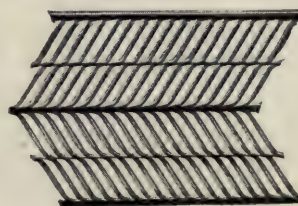
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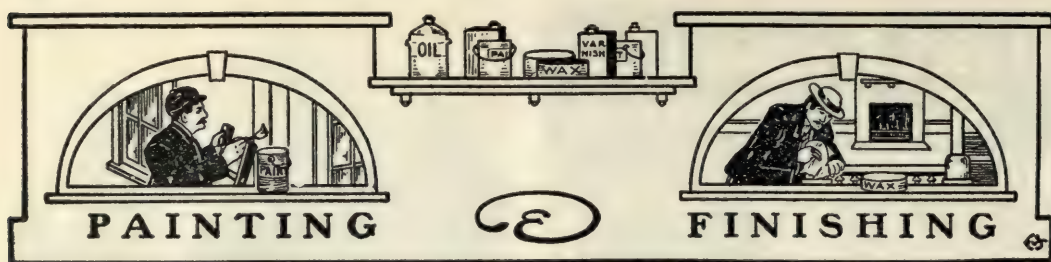
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IN an average outside paint job there is an opportunity for a saving in labor expense. Take for instance an ordinary colonial clapboard house measuring approximately five hundred yards at 20 cents per yard.

The principal cost item is labor. If we handle a job of this kind we can figure on two days, with three men, for first coating and two days with four men, for second coating. Ordinarily this will be considered doing well. Thus we have consumed one hundred and twelve hours, at forty-five cents per hour, which brings the labor cost to fifty dollars and forty cents. I contend that right here we can open the only avenue for a saving of any amount in the cost of the job.

You know that any man receiving the maximum wage can properly cover with paint a square yard of clapboarding that is in good condition, in less than one minute, actual time, if he wants to. The yardage of a house is invariably figured on the square yard basis, extra yardage being allowed for all decorative and other unusual details of the structure.

Now if this man were kept going at half his possible speed, the five hundred yards on this house would be covered both coats in about thirty-three hours, yet one hundred and twelve are consumed. This proves conclusively that the greatest cost entering into a paint job of this kind is the time used in getting into position to apply paint. Every minute saved here adds to your profit without taking a cent's worth of value from the customer. Therefore this particular item should be considered by all men contracting for painting.

The Care of Floors.

If one only knows how, nothing is easier than the care of a well finished floor. Water should never be used on a

waxed floor. The less water used on any floor the better. Painted, varnished and oiled floors may be cleaned with crude petroleum. Dip a woolen cloth in the petroleum and rub the boards with it. When the entire floor has been cleaned in this manner close the room for a few hours. Cover an old floor brush with a piece of clean woolen cloth and rub the floor hard. This will remove any superfluous oil, and polish the floor. Occasionally add half a pint of paraffine oil to each quart of petroleum. This will keep the floor in fine condition. It is most important that every particle of superfluous oil should be removed in the manner I have indicated. If this is neglected many times the oil will hold the dust and you will soon have a dark dingy floor. Painted, varnished and oiled floors can be wiped with a cloth which has been wrung out of water. This will remove the dust, but will not add to the luster. Waxed floors should be dusted with a soft cloth or dust mop. To remove dirt spots from such floors wipe with a cloth which has been dampened with turpentine. This will remove the wax, and it will then be necessary to go over the spots with a cloth slightly moistened with wax.

Cement Finish for Woodwork.

One of the problems which often confronts the painter of the present day is to finish the woodwork of a house in such a manner that it will correspond with the cement used in construction. The cornices, balconies and porches must be finished to look as if they were made of cement, and this is not at all difficult, the first, it is natural that the surface should have the granulated or the rough appearance of cement, and, therefore, it is best to sand the woodwork. The process is, of course, well known to the ancients, but to the young men growing up

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It is absolutely wind, weather, storm, fire and lightning proof.

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PAINTING AND FINISHING—Continued

in this generation it is out of date and sometimes even unknown.

After the wood has been well primed, give it a second coat of oil and lead color; have the paint quite heavy, and use only oil for thinning—use no turpentine. Into this paint blow sand, with a sander. Cold water paints are the best to use.

For coating cement walls, both smooth and pebble-dashed, it is ideal, and for painting sanded woodwork it is superb.

The color, of course, must be carefully matched. Cold water paint comes in a white powder, cement gray, and several tints. It is most practical to buy the white in bulk, and a small quantity of the different shades, then mix together to obtain the right color. In mixing this paint, great mistakes are often made. It can be done in one way only, namely, this: First, put a certain quantity of the dry powder into the pail or keg, then add a small quantity of water till it is thoroughly worked up and then thin it to the proper working consistency. Remember, it is paint, not whitewash, so do not thin it too much.

If, on the other hand, the powder is poured into a pail of water and stirred around, the substance will foam and lose its mordant power, and it can be brushed off after it has dried on the wall. The cold water paint is strong enough, so that for light tints the ordinary water-color pigments can be used. Yellow ochre, vermilion red, umber and black can be mixed up dry in powder before water is added, or stirred up in separate cups and added after. It is to be remembered that this is water color, and that it dries out lighter. It must dry before the exact shade can be known.—Building Age.

To Clean Painted or Frescoed Walls.

Use a paste made of vinegar and baking soda with a small amount of salt added. The ingredients should be mixed in a large dish and applied to the wall with a cloth. The grease and fly specks as well as the carbon deposits from kitchen smoke are quickly removed. The mixture is harmless. After the wall is thoroughly cleaned, it should be washed with warm water and soap, then dried with a cloth. The mixture works equally well on enameled baths and glass or white porcelain.



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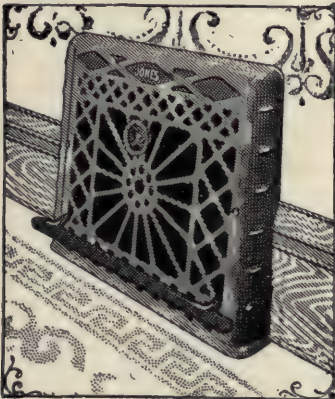
have stood the test for over twenty-five years in all parts of the world. Thousands of people have used them, and hundreds of unsolicited testimonials have been received, showing that they look better, wear better and preserve the wood better than any other exterior colorings.

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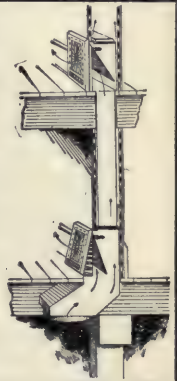
during the coldest weather may be secured by installing the "JONES" System of Heating, one principal of which is the heating of one room on two floors from the same basement pipe, insures not only a saving, but produces the results wanted.

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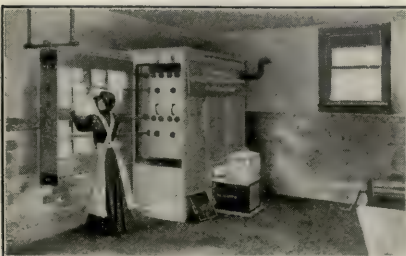
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CHICAGO

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Lighting the Modern Home.

Extracts from article in National Builder.



ASSUMING our modern home to be a detached house, we will want a light on the front porch not only to welcome our guest and light his steps to the door, but also that we shall see who the intruder may be before admitting him. For that reason the light on the porch should not be placed too far away from the door. If the porch roof is high this light can be extended on an arm from over the door, or on a bracket at the side of the door, but in all cases it should be inclosed in a diffusing globe. If electric current is to be used, this light should be controlled by a switch in the hall placed near the door, and it is also advisable to control this and the hall light by a switch placed near the owner's bedside; who then is able to extinguish these lights upon retiring for the night, and to relight them at any time in case of a night alarm.

The hall is one place that does not require to be brilliantly lighted. The illumination should be of low intensity, but well diffused to eliminate all shadows. Usually an eight or ten candle power light in a diffusing globe or shade is sufficient, suspended from the ceiling in a position to light the hall and stairway.

The living room should have a good, general illumination of one foot candle intensity in the remote parts of the room and about two-foot candles near the center. In the great majority of cases, with our modern homes, this can be satisfactorily accomplished by installing a cluster of three or four 16 candle power lights in the center of the room, supplemented, if need be, by bracket lights on the side walls. An excellent plan also, where the size of the room will permit, is to divide the ceiling into squares of about five to eight feet each, and place a light in the center of each square. This will dispense

with the bracket lights and provides very good general illumination. This plan, of course, is applicable only to electric lights, or the inverted gas mantle. All the lights in this room should be in diffusing globes, with the possible exception of one light in the center cluster, which might be inclosed in a concentrating globe to concentrate a portion of the light on the table.

If electric current is used it will be advantageous to install a few baseboard receptacles, say one near the fireplace, one or two in the further dark corners of the room and near or between the windows. They cost but little and are often convenient for an additional reading light, or electric fan.

The center cluster, if electric, should be controlled by a switch placed in a convenient position near the door.

The dining room should have a general illumination of about one-foot candle intensity and a concentrated light on the table a little higher, say one and one-half foot candles. The tendency very often is to make the dining-room dark, almost gloomy in effect. The heavy beamed ceiling in dark colors, the side walls, trim and furnishings in dark oak, and the lights concealed in dark green shades, all quite artistic—perhaps, but too gloomy and has a depressing effect upon the digestion. To get the best results from our food, everything in and about the dining room should be bright and cheerful; we need merry talk and laughter to add zest to the meal.

When the "indirect" lighting effect is attempted, it is by far the better plan, for residence work at least, to use the semi-indirect fixture which is usually of bowl, or dish shaped glass, of milk white, frosted or vari-colored, as desired; in fact they may be had of beautiful design to harmonize with any color scheme and add greatly to the artistic effect.

For the pantry, one light is sufficient



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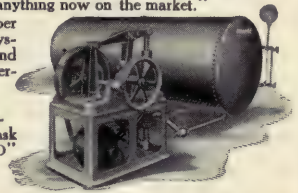
Being responsible for the satisfactory working of every Kewanee System, we received all complaints in regard to defects in pumping machinery and difficulties encountered in installing and operating it. As far as possible, we had manufacturers change designs and material to correct the faults in their pumps and we began making our own pumping machinery only when we found that old designs, old shop machinery,

and old methods prevented us from getting as good pumping machinery for our customers as we knew they were entitled to.

We candidly believe that when we started to make our own line of pumping machinery, we had a better knowledge of the strong and weak points of what the market afforded in this line and also of the difficulties in installing and operating which were encountered by all kinds of men in all kinds of places, than anyone else ever had.

We were not tied down by any old ideas, old designs or old shop equipment. We were not forced to hurry for we had an established business with customers who would take whatever machinery we could furnish with our complete Kewanee Systems. The market was already made for whatever we would manufacture and brand with the Kewanee name, but we laid down this rule and have followed it consistently through the development of the whole line of Kewanee Pumping Machinery and the special devices which go with it. "We will not manufacture anything unless we are sure that it is a distinct improvement on anything now on the market."

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in a diffusing globe, and usually more convenient on a bracket. The kitchen should be much better lighted than is usually the case. It is the main spring of our domestic economy, and should receive as much care and attention certainly as any other part of the house; yet it is very often greatly neglected.

It requires a good general illumination of not less than one foot candle which can be secured in practically all cases by a 16 c. p. light in the center of the room. It further needs increased lighting in the vicinity of the serving table and the sink. This can be accomplished by a bracket light on the side wall, but it should not be placed in such a position that anyone standing at the sink is in his own light. The kitchen sink is rarely lighted as it should be, with the result that the surroundings are often permitted to get in a dirty and unsanitary condition. All the closets and corners should be well lighted; light colored paint, of course, aids greatly in securing this result.

Give the kitchen good light and good air, it is worth it.

The cellar requires general illumination of low intensity, about one-half candle foot, but somewhat localized; one light near the stairs, one near the furnace, or boiler as the case may be, and one near the coal bin, if far removed from the furnace is usually sufficient. If globes are used they should be diffusing. If electric, these lights should be controlled by a push button switch at the cellar door; if gas, they should be electric lighted by this same switch in the same location. A dry cell battery does the work, and the outfit is cheap, but very convenient and safe, no matches being used in the cellar.

The bed chamber requires a general illumination of not much over one-half foot candle, generally secured by a center light, but supplemented by one, or preferably two lights, of 8 or 10 c. p. placed at either side of the bureau or

dresser. It is not advisable to place a light above the dresser as it leaves the lower part of the face in deep shadows. All these lights should be in diffusing globes or shades.

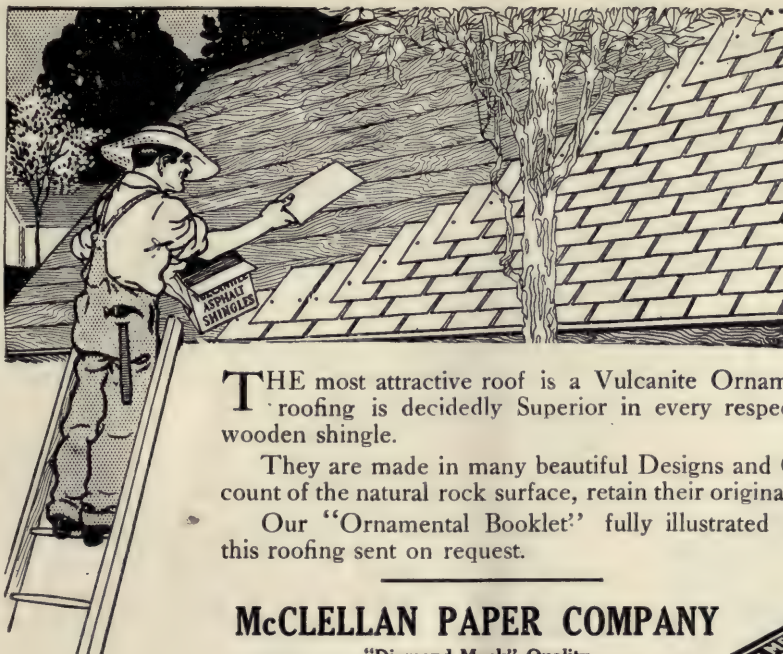
Use of Gas Heaters in Residence Heating.

It is customary, in many instances, to make use of gas heaters for warming bathrooms. This practice is especially noticeable in the Gulf States where it is not uncommon to see these heaters also used in bedrooms for an hour or more at morning and at night during the warmer days of winter, when the house heating apparatus is not in operation. Gas heaters of this type are generally without any smoke flue to carry off the colorless, odorless smoke to the outside air. Commenting on gas heaters used in this way, Dr. W. A. Evans, writing in the "Chicago Tribune," declares that they are just about as vicious a device as is known to civilized society.

"Speaking generally," he adds, "when 1 cu. ft. of gas is burned, 2 cu. ft. of oxygen or as much as is contained in 10 cu. ft. of air, is used up and 3 cu. ft. of carbonic acid gas is generated. One can readily see that a gas stove running a few minutes in a closed room makes the air unfit to breathe. In the case of a bathroom, as the temperature of the air quickly gets over 80 deg., and as the water in the tub evaporates rapidly, the humidity of the room quickly reaches 70 per cent. or more. Fat men, or men with poor hearts, presently become dizzy."

Dr. Evans calls attention to the fact that in many cities, the ordinances require that such heaters shall have a stove pipe leading to the outside air. His conclusions are that "gas heaters without stove pipes in bathrooms should be made unlawful everywhere. Gas heaters with or without pipes are allowable in bedrooms where they are in use for periods not exceeding 15 minutes, on condition that the room be aired soon afterward."

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SPLINTERS AND SHAVINGS

Prevailing Rate of Wages.



DECISION which is of special interest and value to building contractors has recently been handed down by the New York court of appeals, the case being one that grew out of the granite work on a municipal building in New York City. The court held that a subcontractor doing the granite work on this building in New York City was not required by the labor law to pay to his quarrymen and stone cutters getting out materials for the building in the State of Maine the prevailing rate of wages in New York City. It pointed out that such quarrymen and stone cutters are not, within the intent of the law, employed "on, about or upon the construction of the building."

It appears that the contractors, the Thompson-Starrett Company, sub-let the granite work to the Mount Waldo Granite Works, which is a Maine corporation. The work of quarrying, cutting, dressing and trimming the granite was done in the state of Maine and the workmen were paid \$3 per day—the prevailing rate of wages in that state. The prevailing rate of wages for the same class of work in the city of New York is \$4.50 per day, and the charge was made that section 3 of the labor law was violated. The contractor and the sub-contractor both agreed to comply with the provisions of the New York labor law. In handing down its decision the court of appeals declares that the statute was not designed to increase the wages paid to workmen in the State of Maine.

Building Materials Only Exception to Price Advance.

The latest statistical bureau report of the United States Department of Labor on "Wholesale Prices" shows that the upward movement in market values of commodities was widely embracive and fairly large in the year 1912, as compared with the preceding twelve months. Of nine groups of commodities, comprehending

255 articles, eight showed varying price advances last year. The one exception had to do with lumber and building materials, in which there was an actual decrease in the group price of 2.1 per cent.

The list of products which are more costly to the consumer than in the year 1911 are here given, together with their respective percentages of price increase: Farm products, 5.7 per cent; food, etc., 6.2; cloths and clothing, nine-tenths of one per cent; fuel and lighting, 9.4; metals and implements, 5.6; drugs and chemicals, 2.2; house furnishing goods, 2.3; miscellaneous, 1.5. The average increase for all the commodities was 3.4 per cent.

St. Louis Lumberman.

Woman in House Building.

If there is one business or profession more than another that would profit by the advice of a woman, it is that of house architecture. We have been looking through houses lately, good, new, expensive ones, and have been amazed at the lack of convenience in them.

If it has two bathrooms, it is more than likely it will have no veranda, or just an apology for one, or perhaps it will have no proper pantry. Or if it has good verandas, a good pantry and two bathrooms, there will be no room suitable for a library, or the front door will be an awkward side entrance or nearly all the windows face the north. We can think of a dozen other such alternatives from the houses through which we have been looking, and none of them were valued at less than \$10,000, nor have been more than ten years built, most of them less than five years.

But it was of the little things about a house that we were thinking particularly when we said that architects need to consult a woman in making out their plans; not a woman who has never done any housework—her advice would be little better than a man's—but of one who has done more than give orders, who has actually worked herself, and has housekeeping down to a science.



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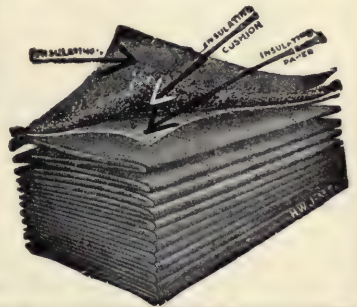
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New Booklets and Trade Notes

"DOORWAYS" is the suggestive title of the latest bulletin sent out by the Richards-Wilcox Company, Aurora, Ill., illustrating their Door Hangers for any door that slides, from parlor to garage. Incidentally, the advantages of doors that slide over doors that hang, for all interior purposes, is discussed, and the increased favor with architects that this style of door is finding.

* * *

We have received a very beautiful catalog from the Hartman-Sanders Company, New York and Chicago. Their Pergola Album No. 28, with many fine plates, illustrates the use of the Koll Patent Lock Joint Column. There are included, illustrations of pergola treatment for entrances, garages, porches, etc., not only for large grounds but adapted to city

lots and limited spaces. The firm has a designing department, which furnishes suggestions for any plot or area of ground. Two of the illustrations used in the article on Pergolas appearing in another section of our November issue, are taken by permission from this catalog.

* * *

An artistic little booklet comes to us from Harry Franklin Baker, landscape gardener, Minneapolis, entitled Suggestions for Fall Planting. In another column, Mr. Baker has elaborated his ideas on this subject. The little booklet has some charming illustration of his work, and contains lists of plants with prices and best time to plant.

* * *

We have received a copy of the publication Architecture and Building, by C. E. S. Schermerhorn, New York City, which is devoted entirely to country houses and bungalows. These are practical and economical plans and will interest our readers.

* * *

A new device of the Kewanee Boiler Co., Kewanee, Ill., for obtaining hot water for apartments or houses by using the garbage and waste as fuel, will interest every householder. Two vexatious problems—the disposal of garbage and the abundant supply of hot water in the house—are here solved in a sanitary, economical and satisfactory manner.

This Water Heating Garbage Burner was enthusiastically recommended in our hearing recently by the owner of a country home who had installed it. The booklet illustrating this device is made up of facts and figures set forth clearly and concisely.

* * *

We have received from the Bridgeport Wood Finishing Company sample booklets and color cards of their new preparation, "Washotint," for decorating and tinting walls. The shades of color shown are quite new and very artistic. The booklets give full directions for use, and describe the merits of the product.

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BY THE EDITOR



N January 1st, 1914, Keith's Magazine enters upon its fifteenth year. From modest beginnings have we steadily pushed forward until today we stand like a well-guided ship, staunch and strong, a strictly up-to-date publication, a practical and authoritative magazine for the prospective home builder and home owner.

But we are not satisfied to remain at this level of success and intend to keep right on growing, that each succeeding year Keith's may increase its prestige and usefulness. While other magazines put out more in quantity, printing a greater number of pages to the issue, can it be said they exceed us in quality, in range of special subjects to which as a "class" or specialized journal, we are devoted?

We shall not digress from the main paths laid down by these fifteen years of development. Our "Designs for

the Homebuilder" section will continue an important and intensely valuable feature. Interior decoration departments devoted to a discussion of "Building Materials," "Heating and Plumbing," "Brick and Cement," "Trade Notes," as well as the more domestic or household departments which are always full of help and truly invaluable to the prospective homebuilder. Our special illustrated articles will be contributed by the brightest of writers from all sections, thereby giving the quite "cosmopolitan" view of the latest and most interesting ideas; what is doing in the building of artistic homes today.

In the furtherance of this thought, the editor wishes to call upon his subscribers to assist him in the introduction and successfully carrying out of a new and special feature for the coming year. This new feature to be a series of contributions under the caption

"HOMES WE HAVE BUILT"

You will be interested in seeing the new homes built by others and hearing of their experiences, and every other reader will likewise be equally interested in your new home. May we not hear from a goodly number of our subscribers who have built homes during, say, the last two years, and to insure as complete a contribution as possible and a splendid series of these "building experiences," we have devoted a fund of \$135.00 to be divided among the 12 best contributions received. \$20.00 of this fund will be paid for the first best article; \$15.00 for the second best article, and

\$10.00 for each of the next 10 articles accepted for publication.

Contributions acceptable for publication should range from 700 to 1,000 words and be illustrated by one good exterior view of the new home, drawing of the floor plan and one or two good interiors. To those who send in building experiences which we do not find opportunity to publish, we will in any event be pleased to enter the contributor for a full year's subscriber to Keith's Magazine. The names of the writers to be printed or not at the contributor's preference.

TIME LIMIT

In order that we may properly arrange and complete this series, it will be necessary for all contributions to be received by the editor not later than April 1st next. We suggest that as many as possible contribute before Christmas. Let us receive a generous response to this suggestion, that all readers of Keith's Magazine may hear of "your" achievement.

The editor does not wish to close this letter without inviting the at-

tention of his readers to the high standing of the advertising patrons of this publication. No advertisers are permitted to enter our columns other than perfectly responsible concerns, and we have every reason to be proud of the representative list of national concerns using our columns. This publication is particular in the accepting of advertising and is ready to back the integrity, fair and honest dealing of every one of them.

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ON HOME BUILDING

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IDEAL HOMES MAGAZINE

M. L. KEITH, Publisher, 426 McKnight Building, Minneapolis, Minn.

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AN ENTRANCE OF DISTINCTION.

KEITH'S MAGAZINE

VOL. XXX

DECEMBER, 1913

No. 6

Recent Ideas in Cement Plaster Houses

By Henry K. Pearson

THE designing of houses is the most fascinating of all the professions. To create is the passion of the human race, and full of meaning is the fine old Latin verb—"create"—to gather, and give out—from which our word is derived. The limitless variety of forms, the wide choice of materials, the differing problems to be solved for varying individual needs—while they

entail racking of brains and many trials, nevertheless afford this joy of creating things to the true enthusiast in his work.

We are to concern ourselves in this article, with some examples of recent design in concrete, or cement plaster; one of the newer materials, or rather new adaptations of a material as old as the race. Even the Pyramids, long the unsolved architectural and engineering mir-



A Cement House in Semi-Spanish Style, in Brighton, Mass.



A Near View of the Garage, in the Same Style as the House.

acle of placing ponderous blocks of stone, are now thought to be of concrete construction. To be sure our modern houses are as far removed from the ponderous construction of the ancients as they are from the primitive uses of mortar in our own early Colonist days, when the word used to designate plaster was "daub," and the selectmen accounts record the payment of "two shillings for 'daubing' the meeting house with mud," etc.

We are not here dealing at all with concrete in its structural form, but only in its use as a coating for the exterior—stucco a few inches thick, used as a veneer over wood or hollow tile or brick, and filling the double office of a perfectly good and sound protection against wind and weather and also a medium of pleasing design. Because it is possible to adulterate concrete with ease and impunity this excellent material has been greatly abused. It has been mixed with coarse, dirty sand so that the resulting substance was indeed "daub," nothing

more nor less than a daub of mud. Dull and heavy looking are the structures plastered with this dark brown substance, grim and unbeautiful to the last degree. But give it a fair deal—buy pure, white cement, and mix it with clean, sharp sand, apply it conscientiously, according to the architect's specifications as to thickness, as to preparation of the receiving surface, as to care in damping and in shielding from the hot sun—and you have an exterior which is susceptible of a thousand variations and of decorative effects innumerable. Soft and pliable to handle as one will in the making—it is like adamant when set for keeping out heat and cold, wind and weather. It is indeed the most responsive of all materials. No other can be so invested with romantic charm, or unite with such kindness of good will in a combination with other materials, whether brick, wood or stone. Many agreeable variations too may be produced in the surface of concrete itself, by enriching its texture with pebbles or frag-

ments of tile, shells or quartz. Or it may be sprinkled with marble dust and produce an exterior splendid as an Italian palace. Or the surface may be given individual interest by introducing color, either by sprinkling it with powdered pigments or by the use of acids. It can be enriched by the insertion of tiles or low

while it conveys strength and sincerity and the interest of unusual line—fails to give the charm of the rich background of greenery against which it is set, the warm color of the massive door and the bright hues of the flowering shrubs and delicate creepers that lend added grace. We do see, however, how the artist has,



Conspicuous for Its Absence of Frivolous and Trifling Detail.

reliefs, or the skillful troweler may even work in a decorative frieze or border of simple nature, to accent some part of the design.

Next to seeing the accomplished result itself, is seeing a picture of it, imperfectly as the black and white prints convey the effects which depend on subtle color tones and diversified textures. The beautiful doorway for instance of our frontispiece, which is one of the photographs used to illustrate this article—

by the use of mere lines, produced an entrance effect of distinction and dignity, in which there is not a jarring note. The details so carefully chosen, the trim of the door, the perfect light lanterns, perfectly placed, the extreme delicacy of the floral effects, adding just the light, contrasting touch, enough and not too much—all are a carefully studied part of this design by a Chicago architect whose work is justly famous. It is always interesting to note the difference in architectural

treatment of the same material in the different sections of the country. Certainly nothing could offer a more decided contrast in design than the second illustration which is a residence in Brighton, Mass., a suburb of Boston, on Commonwealth avenue. The Spanish mission idea was slow in reaching our eastern coast, but it seems quite popular now. This type has been rather freely treated in its association with the coarse field stone of the locality, though the red tile roofs and tall, minaret chimneys are pronounced details. Though one of the handsomest residences in this handsome suburb, on the whole we find little to admire, and it is interesting only as showing the different ideas of different sections. The illustration following shows the treatment of the garage which belongs to this house.



Showing Use of Inset Over Front Entrance. In This Instance the Inset Is a Plaster Cast.

A Minneapolis house which is conspicuous for its absence of frivolous and trifling details in its almost severe simplicity is in marked contrast to the preceding illustrations, has been photographed when barely completed and thus lacking the softening effects that trees and shrubbery up against the light grey stucco, vines clinging to the plain surface and drooping from the flower boxes will later invest this exterior with grace and charm, while a tall enclosing hedge will give the needed sense of seclusion. Here, too, the photograph fails to give the color relief afforded by the dark red of the asphalt shingle roofs, the rich mahogany of the entrance door, and the quaint touch of red brick edging the broad entrance steps and approach. The pergola roofed sun-parlor extends across the south end of the house and an optical illusion or delusion of the camera quite destroys the effect of the two groups of casements which repeat those of the front façade. Vines are to be trained up the angles of this projection and droop from the pergola roof. A crimson rambler is to trail its delicate foliage, lacelike shadows and bright blossoms along the white lattice in front. The decorative use of lattice work is well illustrated here where it is used with great discretion and reserve in this example of newest ideas in stucco exteriors. The charm of broad spaces of plaster with the play of sunlight and shadow, of low lines and a broad sheltering roof is part of this simple but extremely satisfying design, which is distinctly handicapped by the bareness of the site.

Nevertheless, here is balance and breadth and repose and a roof unfretted by dormers—qualities which deserve to be rewarded.

In the front view of the Kenwood Park house, Minneapolis, we have a pleasing instance of the use of insets of tile or casts, before alluded to, to give interest



Home of E. H. Ehrman, Oak Park, Chicago.

to the plaster surface. In this house, the home of a Minneapolis architect, can readily be traced the influence of cultivated ideas and an artistic temperament.

Oak Park in Chicago is a fruitful field, full of architectural interest. Our closing example is the home of E. H. Ehrman in that lovely suburb, and is not unlike in the general idea the just-completed Minneapolis residence which precedes it. Here time has added the softening grace of lace-like foliage and encircling shrubs, which are everything to the plaster exterior. Here, too, the simple roof lines are broad and low and the sunporch is

stretched across the south end. The park-like environment of trees adds much to the effect of the design. In a slight degree we have thus indicated what is being done in modern house building to express domestic design in terms of cement. Today stucco in its various forms, either alone or combined with other materials, is used for at least one-half of the new homes being built. And what individuality, what diversity of outline and texture as well as color is obtained from this responsive material, which has so enriched modern architecture.

N. B.—In the January issue we will show recent ideas in cement houses in the Southwest.

American Woods and Their Beauty

By Wesley T. Christine



WID it ever fall to your lot to see a Mississippi river roustabout drop a melon? If it has, do you recall what happened? Did he not grab the seedless heart of that melon, take a huge bite and kick the inoffending rind into the river?

That is about on a parallel with the way the people of North America have treated the wonderful timber wealth of this continent. They grabbed the heart, used a portion of it and destroyed the remainder.

A time came when there was not enough heart to go around, when the heart did not drop at their feet and someone, related to the coyote, raised a mournful, wailing cry of timber exhaustion.

What really had happened was that the American roustabout, the user of forest products, was asked to take that portion of the forest watermelon in which the seeds grow. He objected strenuously to the trouble of picking out the seeds. He mourned the passing of the days when he could split black walnut into rails, when he could cut oak and hickory for his stove or fireplace and when he could buy clear white pine strips for his fences at a nominal price.

He longed for the seedless heart of the watermelon as his portion.

It may prove something of a shock for the people of the United States who have heard the cry of timber exhaustion to learn that we have more timber now than we had twenty years ago; that there exists today more usable forest wealth than existed in 1893. This is true despite a production during the last twenty years of 1,000 billion feet of timber.

Not only is there more now than there was twenty years ago, but if estimates are any criterion, there is more than 100 per cent more.

Twenty years ago forests were valued for their heart content. Now we are using the portions formerly left in the woods, those destroyed at the mill in olden times, those kinds previously dubbed "valueless," and those trees which, because of the defects they contained, were left a prey to wind and fire. Here is the result:

In 1889 the forests of the United States were estimated to contain approximately 1,250 billion feet of timber on the basis on which the timber then was being cut. In 1909 the Bureau of Corporation made a canvass of the timber of the United States and placed the stand at 2,800 billion feet.

The general building public suffers under the delusion that lumber is unduly high in price and is informed "that there ain't any lumber, anyhow." Compared with the price of other commodities the price of lumber is not high. As for the other part of it, usually the markets of the United States and Canada are oversupplied with exceptionally high grade building and factory lumber of all kinds.

The use of wood "as wood," is the big question for consideration, at this time when so many new, some of them untried and unproven, substitutes are being pressed upon the attention of the builder. To the great American public wood is wood, light or heavy, hard or soft, easy or difficult to work, solid, striped or mottled in appearance.

In the form of lumber it is difficult to

identify varieties, difficult even for those who have been engaged in the manufacture and sale of lumber all their lives. Certain woods are recognized readily by those familiar with lumber, but certain other woods look very much like them and the novice quickly becomes confused. Besides, there are no text books from which he can ascertain anything about lumber, he is not greatly interested in

him directly, regardless of how or with what he builds. In the first place there is no substance manufactured that will take the place of wood as a shield against the elements. The nearest approach to wood is paper, made largely or entirely of wood fiber held in place with an artificial glue.

Fad materials, heralded as building trade revolutionizers when placed on the



A Home Built of Wood.

the subject, so when in the market for lumber he orders the sizes he requires and leaves it to the dealer to furnish the particular kind he carries in stock.

The dealer is in business for business reasons and ordinarily will handle those kinds that yield him the greatest profit. The architect serves as a check in some cases, but the vast majority of American people buy certain sizes, rather than certain sizes of certain kinds of lumber.

Whether or not the home builder is consciously interested in this question of lumber values and supplies, it concerns

market, are forgotten in a few years. The structures built of such materials are dismantled and the material forgotten, while wood and wood structures continue to serve with the unvarying faithfulness with which they have served mankind since the beginning of the world.

The competition between wood and substitutes for wood may be regarded as a family affair in which the outsider has no part, and in which, if he be wise, he will not take sides.

Commercially woods are divided into two classes: Hardwoods and soft woods.

The classification first mentioned embraces all of the broad-leaved trees of America. To "soft woods" is assigned all the needle leaved or cone bearing trees, also known as coniferous woods.

Like all general classifications this one may prove confusing. Some of the hardwoods are softer than some of the soft woods. Conversely, some of the soft woods are heavier, stronger and harder than some of the hardwoods.

Therefore it is not sufficient for the builder to ask for hardwood or softwood for any purpose but is incumbent on him to specify the kind. Luckily most Americans have a very good idea of the general run of woods, though are not so familiar with their relative values as they should be.

Hardwoods represents 20 to 22 per cent of the total production of lumber but for the purpose of this article may well be considered first.

Two of the hardwoods in which affection centered early in the history of our development are scarce now but have not disappeared from the market. These are black walnut and cherry. The small product now reaching the market is used largely by the factory trade, for furniture, gun stocks, moldings, machinery parts, etc. Manufacturers of forty-five different products, in Illinois, are using black walnut wholly or in part. Reports on cherry show about the same range of uses.

Should any builder desire to use either wood they may be procured and to judge by the wholesale price they should not cost very much more than choice white oak.

Decreases in the production of walnut and cherry caused manufacturers to inquire into the merits of other kinds of hardwood timber. The northern and eastern forests abounded in birch to which subsequently was given the nickname "the mahogany of North America," be-

cause of its physical—not color or grain—resemblance to the prized wood of the tropics.

The southern Appalachian and other southern states contained a heavy growth of red gum. This was one kind of timber neglected by the early settler who regarded it as part of the "rind" of the forest melon. It was taken up gingerly at first because of its indifferent reputation due to the fact that it was not like other woods and could not be handled with the same degree of carelessness. It was the south's offering as a substitute for the walnut and cherry it did not have and has been a very acceptable and valuable one.

These two woods, red gum and red birch, largely have taken the place of walnut and cherry in the building field and to some extent in the manufacturing field as well.

White oak and red oak are produced in abundance and are put on the market in better shape now than formerly. These woods are more valuable now than ever before, therefore are given better care throughout their journey from the woods to the consumer. Oak has played an important part in the history of mankind as well as in the history of North America. Respecting current use perhaps it is sufficient to say that it is employed as the wooden parts of 376 different products of Illinois factories.

Yellow poplar, the great building and factory wood of the Ohio river valley, because of early wasteful practices and the farmer's habit of girdling trees and later burning them, is becoming scarce. Wagon manufacturers and producers of vehicles and farm machinery were the first to voice alarm: "There is not going to be sufficient yellow poplar to make wagon bodies for free-born American citizens to ride about in or to haul things around in and how can we possibly make a vehicle without a yellow poplar body?"

The how was to bring cottonwood on the market and to create millions of dollars in timber values by the simple demonstration that cottonwood was suitable for vehicle bodies and for scores of other uses.

Ash, hickory and white oak were the one-time mainstays of the vehicle and farm implement manufacturers. These woods were used for axles, coupling poles, tongues and other wooden parts of the running gear. Longleaf yellow pine now is being used almost exclusively for pole stock. Maple, birch, beech, red gum, rock elm, ash, hickory and white oak are competing for the remainder of the trade.

Basswood, perhaps the softest, lightest and most even textured of the better known hardwoods, is maintaining its place in the industries. It divides honors with white pine as the piano key stock of the country, it is made into molding, siding and used for scores of purposes by the factory trade.

Chestnut is little known in western markets except as a casket wood, but it is a wood very extensively used in the east.

Among the woods of minor production are persimmon, used in the manufacture of lasts and shuttle blocks; holly, good for the same high purposes; beech, now a flooring wood and a good one; soft elm, the standard material for chair rounds, legs and for staves and hoops.

Oak may be termed the national trim and furniture wood. It now is called upon to divide honors with birch and red gum and with others showing beauty of color and figure, among them being many of the so-called softwoods.

Yellow poplar, basswood, sap gum and tupelo are retaining their places among the siding and outside trim woods. These woods are soft, and will hold paint, two of the necessary characteristics.

In considering lumber as a building material the user should regard it as a raw

material. A house, barn, corncrib, garage, office or household furniture or contrivance of any kind into the construction of which wood enters is a finished product, the cost of which is made up of three items: Value of the raw material, cost of labor, and profit.

It costs as much to handle the least valuable and least suited wood, usually as it does to handle the most valuable and best suited kind. The only difference in the cost of two articles, one made from the best the other from the poorest raw material, should be the difference in the cost of the raw material. In house building much of the difference in the cost of the raw material is offset by the lower labor cost of handling the better kinds. That is not a very startling truth in itself but it leads to one:

Each home owner should select the kinds of lumber for the several purposes for which they are to be used on a basis of their proven value for such purposes. He can secure fairly reliable information from local lumber dealers, from lumber trade papers, from all building papers and from any of the organizations that are giving the several kinds of wood publicity.

Fifteen years ago the building and factory trades of the United States entertained certain fixed ideas regarding wood values. Their preferences were accepted as a matter of course. Today their needs are being supplied with good material, with suitable material at a fair price as a matter of necessity. Perhaps the pendulum has swung too far in the direction of indiscriminate use of woods, for certain kinds of lumber now are being employed for purposes for which they are not suited, but something was necessary to cure the people of this country of their expensive habit of eating melon hearts and to teach them that other portions of the forest melon are good and should be used.

Some Sun-Parlors I Have Seen

By Sidney Pattee



IN THE history of the modern American home the present day may properly be called the porch period. It is a curious fact that Americans are really the only people who know the use of the porch. The terrace of the English country home serves many of the same purposes, but for the development of this part of the house we must study our own domestic architecture. It is no longer considered faddish, but necessary, that people should live as much as possible in the sun and air, as is evidenced in every recently-built home,

and in the alterations going on in older houses. Living, sleeping and sun porches are the order of the day, and it almost looks as though it would soon be unnecessary to plan for any other part of a house, outside of the kitchen.

The majority of us have been taking vast satisfaction in our living porches this summer, and the first chill in the air which sent us indoors has caused a sigh of regret. But must we really give up this pleasure, as well as the use of from one-eighth to one-fifth of the floor space of the house, practically an additional



Connecting Up a Radiator with the House Plant.

room? There is a happy solution in the sun parlor, which is guaranteed to banish many a wintry chill, to temper the long stretch of cold, to link autumn with spring. In its simplest form it is within the reach of the most modest household, or it can be a beautiful addition to the most pretentious mansion, and being of limitless adaptability, it will take on the personality of each individual home.

the same buttons which hold the wire screens during the summer. If there is an open railing, the glass sections will extend from floor to ceiling. It is better to have the sash fitted with rather small panes, as a matter of economy in case of breakage and to avoid a suggestion of coldness by large expanses of glass.

Where the sun parlor is a separate feature, it is built out if possible on the



Curtains and Hangings of a Rough-Textured Chintz.

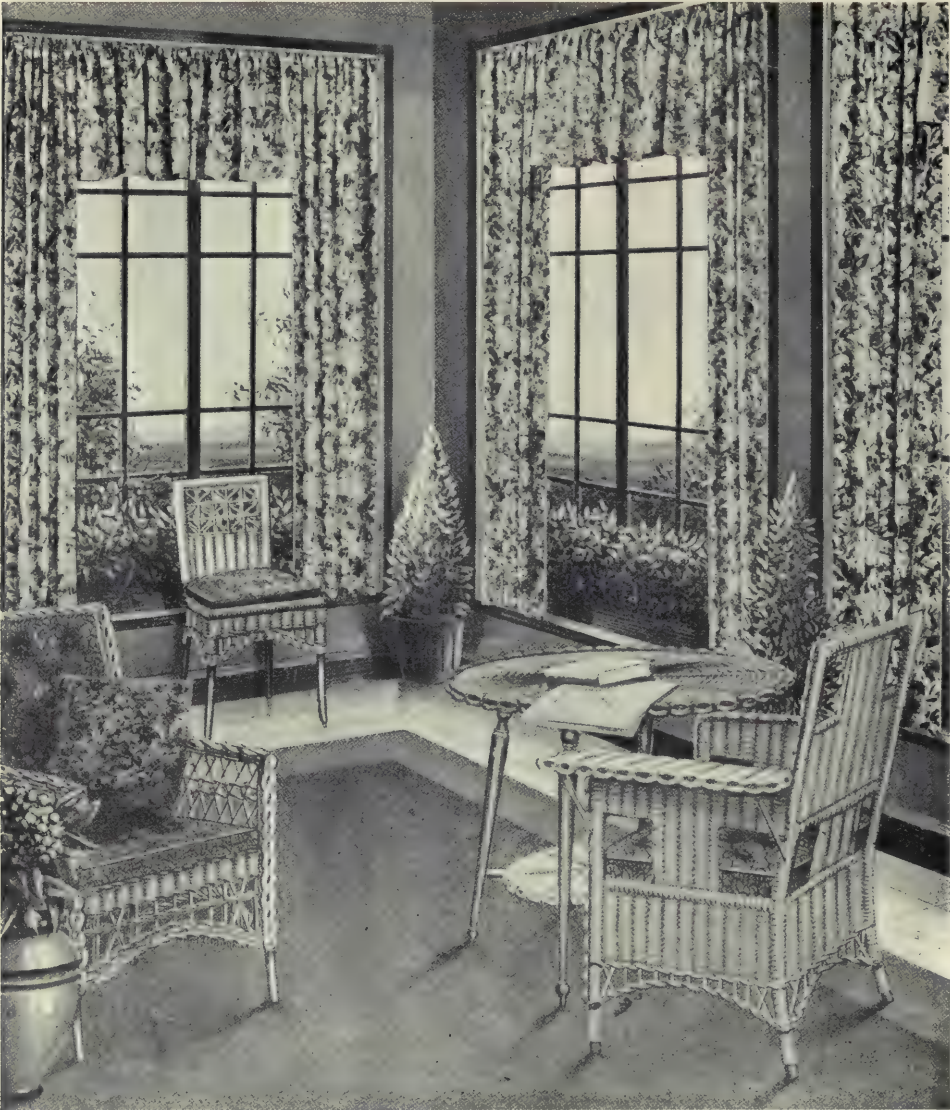
In seaside homes it is necessary to have some protection from the strong winds, even during the warm season, and for this purpose the porches are often partially enclosed with glass. This suggests the simplest method of securing the use of the ordinary porch for the year round, provided, of course, that it is on the side of the house to receive a fair share of direct sunlight. If the porch has square supports and a solid parapet it is an easy matter to have storm sashes made to fit the spaces in between and even utilize

south exposure, sometimes with the sleeping porch above—thus securing every bit of sunlight during the day, unless one is so unfortunate as to have another house put in close beside, cutting off the precious midday heat, a state of affairs which can be avoided only by surrounding one's self with plenty of "elbow room" in the first place. Such a room is often planned as a combination living room and conservatory, an idea to be worked out according to the expense allowed. An octagonal porch overlooking a noble

river was fitted up with sashes of ornamental design to conform with other windows in the house, and with the addition of a few hanging ferns, palms, an orange

of a cement house, by means of storm sashes on three sides.

The heating of the porch must be considered if its full benefits are to be



Walls Tinted Gray-Green, Curtains Deep Dull Pink Flowers on Ivory Ground.

tree and a singing bird, became a bright winter school room for the children.

One of the most original methods noticed of providing a sun room, was the transformation of a pergola, permanently ceiled, and built against the south wall

derived. In building, provision can be made for connecting up a radiator or two with the house plant, or it is not impossible to put in an extra duct afterwards. There has lately been shown a small stove for burning garbage in the basement,



A Sun-Parlor in a Minneapolis Residence Just Completed, Which Opens Into Both Dining and Living Rooms Through Wide French Doors.

which is capable of supplying a limited amount of radiation, just about what would be needed for the porch. If there is a chimney on the same side of the house, by all means have an outside fire-place built in, as nothing would so add to the coziness and enjoyment of the room. Black iron is suggested for the andirons and shovels, as standing exposure better than the brass. There will always be some exposure to the outside air, for whenever it is warm enough in the middle of the day, the sashes are thrown open to the outer freshness. The lighting fixtures are not necessarily of the conventional type. A quaint wooden one is shown in illustration No. 1,

and there are also odd ones in wicker work, which are exceedingly effective in such a room.

The keynote of the decorations and fur-



Radiator and Fireplace on Porch of Residence of W. W. Hearne, Wayne, Pa. D. Knickerbocker Boyd, Architect.



A Cottage Sun-Parlor Secured by Glazing in the Porch.

nishings should be simplicity and suitability, for this most informal room of the house depends for its charm on its suggestiveness, and must combine ease and warmth with out-of-dooriness. That woven furniture is most popular is evidenced by its very general use, though the heavier mission style sometimes fits in equally well. The pleasing combinations possible in willow furniture with large patterned fabrics, is shown in Illustration No. 2; the cushions and hangings are a rough-textured chintz in a bold chateau design of all-over foliage, both design and fabrics uniting in appropriate material for the background of brick walls in their strong, rich coloring.

The color scheme will depend on the house color, if the house wall forms one or more sides of the room. There is a delightful freshness about a gray-walled room, with a green lattice on the gray background, and thin bamboo shades of green and gray. This combination of colors is used in Illustration No. 3. The floor is gray tiled, with a Scotch rug in two shades of green. The walls are tinted gray-green, which brings out the deep, dull-pink flowers on an ivory ground, in the curtains and cushions, made of Colo-

nial Reliance taffeta. The natural-finished wicker furniture is upholstered in gray-green Jasper-cloth.

One of our illustrations shows a novel and artistic treatment of the sun parlor in a Minneapolis residence just completed. The picture shows it before being furnished. This sun room is 25 feet long, and stretches across the entire south end of the house, opening through double French doors into both the dining and living rooms. It is heated by a large radiator, and has fourteen inswinging casements.

A gray undertone runs through the decorative scheme of these three rooms, with woodwork of white enamel and mahogany. The foliage tapestry of the dining room is in rather light, but dull, blues and greens; while a decoration of woodbine in shades of green is carried, in freehand fresco over the tops of the casements, falling between in graceful sprays, on a gray-tinted wall. The wood trim is stained a bog-green.

There is a great advantage in having the sun parlor at the back of the house, for the sake of the privacy that is afforded, and hence for its general usefulness, offering a quiet spot for sewing or reading, or the children's study, away from the distractions of the busy street. If it must be nearer the front, it may still be partially sheltered by vines and flower boxes, and these are a really important part of the furnishings. An ivy from a box along the floor can be trained all over a cement wall, with flower boxes to border the glass sides, and hanging baskets of vines and ferns.

The value of the sun parlor lies in its usability, and this is limited only by the needs of the household. It is an ever increasingly strong and economical factor in the health and happiness of the home.

A Rest House for Women

By Kate Randall

THIS is considered a very materialistic generation, yet the spirit of brotherhood has never been as strong, and the helping hands held out to tired women and little children is one of the most beautiful manifestations of this spirit.

On the second floor is a nice little dining room with small tables and a convenient kitchenette, where tea and coffee may be made or luncheon warmed and eaten in comfort at the small tables. And on either side are generous upper porches. Certainly all who avail themselves of



Rest House for Women in Pasadena, Cal.

Our illustration shows one of the Rest Houses provided for women in one of our public parks. Here tired mothers may come and rest and read and working girls and busy women bring their luncheons at the noon hour, and find the quiet and comforts they crave. A large sitting room, with easy chairs and good reading, occupies the whole front of the bungalow, and back of this are most hygienic toilets, and a quiet rest room, with four or five couches, each with its large screen to insure perfect privacy.

these comforts must appreciate the perfect order and neatness about them, and the beauty of a restful simplicity within the reach of almost any family.

The cottage is plastered on the exterior, with a dark trim and a Malthoid roof. Inside it has rough, tinted plaster above a high wainscoting. This is finished in light brown oil stain with a slight trace of green. The plan is so attractive and practical that, with a few changes, in the inside arrangement, it would make a most charming private home.

Nursery Treatment for the Country House

By George Hopkins



NOWADAYS the nursery demands its full share of consideration in the planning of the house. First, this room must be located so that it will receive plenty of air and sunshine. The windows need be carefully located to insure an even distribution of light; the coloring should be restful and the decorations simple.

White, heretofore, has been a great

is hardly distinguishable from the water-color frescoes of the panels below, encircling the room.

In the exact center of each of the four walls a space one yard and eighteen inches long has been allotted to the panels and the same three-inch strip is placed on either side, dividing the panel off. These strips, of course, are placed at right angles with the first mouldings.



Mother Goose Frieze for Nursery Decoration.

favorite for nurseries, and though very hygienic in appearance, it is not actually more so than colors, and white, scientists tell us, is very hard on children's eyes—therefore better not employed for a nursery. Deep cream color and light gray are better.

The illustrations shown are panels in a nursery where a light French gray relieved by pastel shades of blue, pink and cream color, prevails. The walls of this room are nine feet high. Next the ceiling runs a flat moulding which is three inches wide, and below this the figure-frieze from Mother Goose. This frieze comes in paper form, but at the top of the room this

The figures and their accessories were first sketched in lightly, then washes of solid color were added and finally the whole was outlined carefully, in brown paint.

Pink is the color most used in the decoration. In the Lady Bug panel the figure wears a pink pinafore with little white puffy short sleeves; her hat is blue with pink roses, the belt is blue, and beneath the pink pinafore protrudes a blue skirt with pink dots on it; the stockings are white with black slippers. The hollyhocks are also done in two shades of pink.

For the pink touches rose was used

with a little white, this making a clean, clear pink. Permanent blue with white brings the same results.

Mistress Mary—reputed to be quite contrary—walks along a path bordered with pink tulips. She wears a blue pinafore with a white skirt shining beneath. Her hat is blue and “grows” pink roses. At the end of the path are conventional rose trees with brown standards. The top of the rose tree is simply a green outline with a few conventional roses inside it. Mistress Mary has just plucked a rose which she carries in one hand, while with the other she holds a green watering spot.

Little Miss Muffet would be a symphony in pink but for her blue hat of two tones, set on her head quite coquettishly above her golden hair. (In fact all of these young ladies have golden hair.)

At the moment the picture was made Miss Muffet was looking into her blue



Lady Bug.

and white bowl, contemplating the pleasure of curds and whey, and quite unconscious of the brown spider who is just about to sit down beside her. The trees from which the spider's web is suspended are brown with conventional pink apples and a few green leaves.

In a room where four panels are permissible, without interfering with the entrance door, it would be well to repeat the Miss Muffet panel for the fourth wall.

Great care should be exercised in drawing these panels to keep the first pencil outline very light and the walls perfectly clean. The real painting of the design

might be accomplished in two ways; with oil or with water colors. If oil paint is used the quality should be the best. Paint that comes in small tin cans and is used for staining fine woodwork or furniture, will do. It may be procured at any first class paint store. For the broad washes a little gasoline will make the paint go on more easily.



Mistress Mary, Quite Contrary, How Does Your Garden Grow.

Where water color is used it should be purchased wherever supplies for decorative purposes are kept.

A third way of accomplishing the work is possible—that of stenciling the design on the wall. In that case the design must be first drawn on stencil paper, and the design cut, then the design must be tacked securely to the wall before the work begins, to prevent the slightest slipping—after which the work should proceed easily. When the stenciling is fin-

The whole room is in keeping with the dainty decoration. At one end of the nursery, beneath a panel, is a window seat; but in place of the cover lifting up, there are little hinged doors in the front of the seat, so that children can more easily put away their toys. This seat is also flanked by cupboards, beneath high windows. The cupboards, too, have doors so that there are plenty of places to put things, and the nursery may always have a tidy appearance.



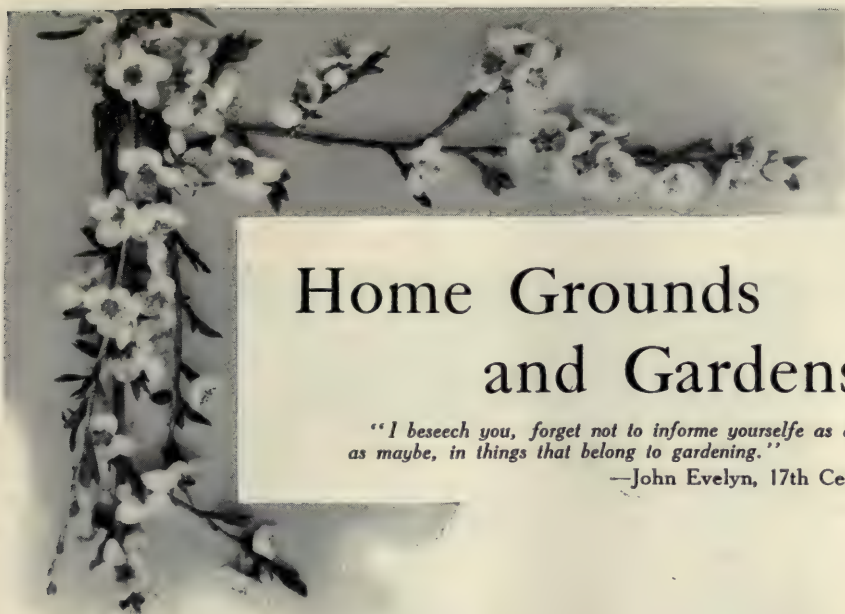
Little Miss Muffet.

ished, remove the design and outline the painting as in the other processes. Unless the panels are repeated this mode of procedure is hardly to be recommended. If, however, the designs should be used more than once for a very large nursery there might be some saving of time and work.

When purchasing brushes for the work, it should be well stipulated whether oil or water-color is to be used, though the addition of gasoline to oil paint makes a water color vehicle. A fine pointed camel's hair brush will be necessary for the outline work, and a broad soft camel's hair for the large washes.

The chairs in this room, being rattan, are easy to clean, and are cushioned with pink linen, which comes from the laundry like new; and this same pink linen hangs at the windows. It is of a light tone and agrees with the pink in the panels.

The hardwood floor is covered with a plain gray rug, bordered with a conventional design showing cream color, blue and pink. There are small tables painted gray like the woodwork. The woodwork and furniture have had several coats of gray paint and a coat of hard varnish; therefore are easily kept clean.




Home Grounds and Gardens

"I beseech you, forget not to inform yourself as diligently as maybe, in things that belong to gardening."

—John Evelyn, 17th Century.

The Indoor Garden in Winter

 HE Indoor Garden needs planning, just as the outdoor one. The first thing to provide is a good stock of loamy soil mixed with sand and leaf mold, and stored in the cellar. Then bulbs should be ordered, and some kinds can be planted now. Geraniums, of course, have been taken up and potted, and the stems cut back. Lilies of the Valley can readily be forced into flower in any home, so that it is an easy matter for a girl to provide her own flowers as a delightful pastime.

It is probable that one could force successfully crowns dug out of the garden in fall and kept in moist soil until they have had a chance to freeze. Surer results will be obtained, however, by buying fifty or a hundred of the crown or pips from the seedsmen, at a cost of about two cents each, and forcing these.

Cut off at least one-third of the roots squarely across with a knife or shears, and plant in garden soil in a small flower

pot, crowding the plants close together. Now water well and set away for a week or two in a cool cellar or attic where the temperature is about 50 degrees. Then bring to a warm place near a stove or radiator where the temperature will be about 75 degrees. For best success a constant temperature of 70 to 80 degrees is necessary for two or three weeks. It is easy enough to get this in the daytime but at night it is more difficult. One of the best ways to keep an even temperature is to place a bellglass over the plant and pot. This prevents sudden changes of temperature and makes success more certain.

The flowers appear about three weeks after the forcing begins and are exceedingly attractive. When cut the stems should be placed in cold water for an hour so they will not wilt so quickly if used on the corsage.

A most striking cactus for winter blooming in the home is the echinopsis

mulleri. They are as easily grown as a geranium, and are prized highly owing to the fact that they bloom for several months, carrying great quantities of long, satiny pink flowers that come out from the bulb-like plant in great numbers. The flowers retain their beauty for a long period. They are not quite as well known as the German Empress, but are gaining in popularity and in a short time they will be popular as an indoor winter bloomer.

The soil for these plants should be composed of fairly good garden loam two parts, and sand one part. In the bottom of the pot there must be a few pieces of broken pottery or charcoal, to provide drainage, for the roots of these plants will not stand soggy earth.

The most important item in forcing bloom from bulbs lies in keeping them as far as possible from the heating stove or register. Strong heat spindles the foliage and weakens and blights blooms.

The neck of the bulb should never be covered with water or soil and if grown in water a piece of charcoal should always be placed around the roots.

Best results can only be obtained by leaving the potted bulbs in a dark, cool place until a good supply of roots have been formed, which in the case of fall potted bulbs, would not take place before Christmas or New Year's. If in soil, the white roots will begin to protrude from

the top soil or hole in bottom of pot. When the plant has arrived at this stage bring gradually into strong light.

Sticking one or two sulphur match heads in the soil, or sprinkling a little sulphur on the surface of earth-potted bulbs, will discourage the small white worms from eating into the bulbs, which keeps them from growing and blooming.



A Pot of Window-Grown Tulips, for Table Decoration.

When hard coal or gas is used in the room where bulbs are to be grown, the room must have a free circulation of fresh air to allow the escape of the poisonous gas which blights buds as fast as they appear. A small kettle of water kept frequently boiling will help keep bulbs healthy.

The white narcissus is one of the surest and sweetest of all the bulbs that flower in winter. It and the golden yel-

low daffodil bloom the first, but hyacinths last the longest in bloom, on toward spring. They are all beautiful and sweet; cheap and easy to grow. They brighten and cheer a winter home in town or country. The busy housewife gets doubly repaid for her outlay of pin money, time and attention when the cold has killed every green thing outside, while indoors the bright flowers are spring-like and gay.

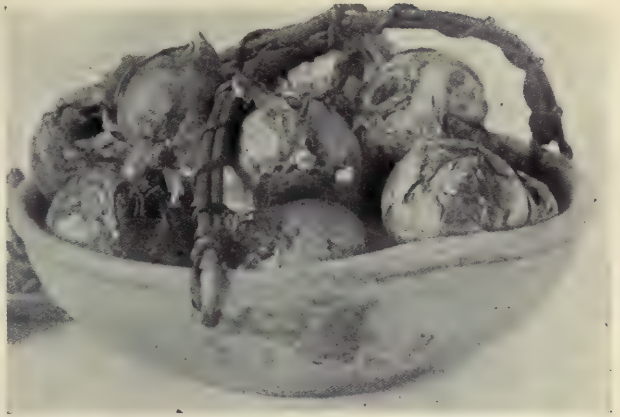
These hardy bulbs may safely be planted outdoors in November and December.

Among the popular winter bloomers there is none more attractive and pleasing as a house plant than the double Chinese hibiscus. It bears a profusion of glossy leaves and numbers of huge flaming flowers of a soft satiny texture.

In summer or winter they are to be found budding and blooming. They will grow to considerable size and can fill an entire window, and are extra fine for balcony or veranda. Often they will fill a corner on the lawn in a partly shaded location.

Minneatus is a large flower and rich as the finest peony, blooming when but a foot high and continuing to do so for weeks, bearing large blossoms of a very rich, burning crimson. These are very showy for the window. Every flower lover will appreciate this variety of the Chinese hibiscus.

Late in the season florists have large quantities of bulbs left over. The rush of the fall trade is over by the middle of October. Then prices fall, as the dealers like to sell out all their stock on hand. They sell mixtures of all kinds of bulbs, hyacinths, tulips, narcissi, daffodils and jonquils, good quality bulbs, at wholesale prices and in wholesale quantities, free by mail. I have had these "leftovers"



A Basket of Dutch Bulbs for Planting in the Indoor Garden.

as late as December, but November is a better time to order for outdoor planting. For one dollar I have secured as many fine bulbs as would cost me four or five dollars early in the fall.

It is better to get mixed sorts of the florist's selection. He generally knows what will be a bargain and can judge of the effect, when the bulbs bloom, better than the amateur ordering the bulbs. When the packages come, the printed label will be a guide in putting jonquils, daffodils and all other kinds to themselves. Plant the largest bulbs of each sort in pots or boxes for indoors, and the others indiscriminately in outdoor borders.

No matter how cold it is, fill pots and boxes with rich compost from the cow stall, and put a handful of sand directly under each bulb. The sand makes it easy for the new roots to penetrate to the rich soil beneath. Water well and set in a darkened closet or other place. Let the bulbs stay in the dark for fully a month, and during that time lay some wet straw or piece of old sacking over the top of the soil and water every now and then just enough to keep the soil damp under the straw or old cloth. By this time the roots will be formed, and the bulbs when brought to light and warmth will put forth beautiful green leaves soon followed by blooms.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 463 JOHN HENRY NEWSON, Cleveland, Ohio

B 464 KEITH'S ARCHITECTURAL SERVICE, Minneapolis

B 465 CHAS. S. SEDGWICK, Minneapolis, Minn.

Design No.

B 466 A. C. CLAUSEN, Minneapolis, Minn.

B 467 BUNGALOWCRAFT CO., Los Angeles, Cal.

B 469 F. E. COLBY, Sioux City, Iowa

Design "B" 463.



DESIGN in pure Colonial type, carried out in wide siding, painted white, with roof of black slate; very simple lines have been followed in this design which shows great character and dignity.

The floor plan shows rooms of ample size, with the characteristic center hall from which the living rooms open. The kitchen is conveniently planned with access to the front hall. The modern feature of a sun room has been added to the design without infringing upon its Colonial character. It has French doors each side of the fireplace opening into the living room. Its general lines are in keeping with the simple front entrance.

Size of ground floor exclusive of sun porch is 48 feet by 32 feet. Estimated cost, complete, about \$7,000.

Design "B" 464.

A shingled house with a rather unusual floor plan. The front entrance is through double French doors opening direct into both the dining and living rooms. A rear entrance is also provided opening into a small hall, from which the stairs lead up to four well arranged chambers on the second floor.

The hall has a built-in seat, and coat closet. The living room is well proportioned, being 15x27 feet with a large brick fireplace on the side.

A cased opening connects the living and dining rooms, both of which have beamed ceilings. The dining room has a

built-in buffet. Besides the pantry, there is a well arranged kitchen with built-in cupboards, etc.

The plans call for a full basement with concrete foundation and cement floor, laundry, fuel, and heater rooms, also a servant's toilet.

The floors throughout are hard wood, with oak finish in living and dining rooms and birch for the balance. It is estimated that this house can be built complete for \$5,500, including hot water, plumbing and electric wiring.

Design "B" 465.

The small cottage shown in this illustration is 20 feet in width by 24 feet in depth, exclusive of the front porch which is 8 feet in width by 6 feet in depth. It is planned and built with intention of keeping the cost within \$1,500, exclusive of any heating or plumbing. The first floor is raised 2 feet above the grade line and the story is 8 feet 6 inches in height, using 12-inch studs, front and rear. The exterior is designed to be cemented on metal lath and all of the casings, cornice, etc., painted white and the roof stained a dark shade of brown or red.

Entering the cottage at the right hand corner into a small hall, the stairs to the second story lead up directly in front between the partitions and a door at the left into the living room, which is 14 feet 6 inches in width by 12 feet in depth, with a dining room 9 feet in width by 11 feet in depth, and the kitchen 9 feet 6 inches by 10 feet 6 inches, with basement



John Henry Newson, Architect.

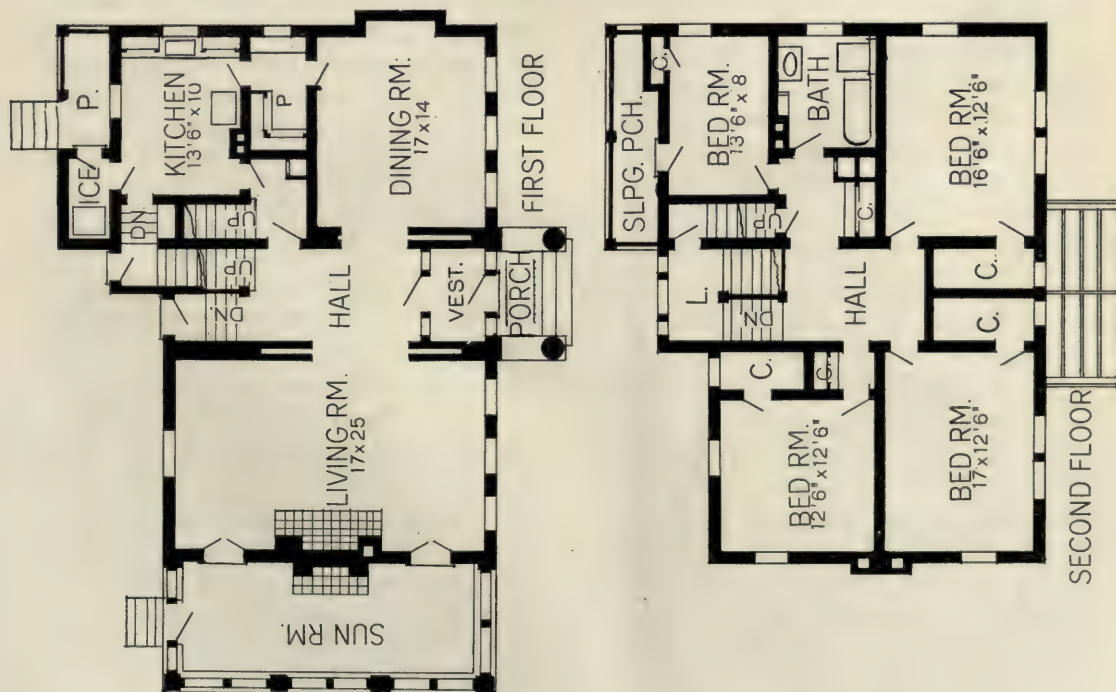
DESIGN B 463

A Pure Colonial Design

and grade entrance. The first floor is finished in pine stained, with Washington fir flooring. The second story finished in No. 2 pine and painted two coats of

paint with a pine floor varnished. There is a good cellar under the house with a cement floor.

The construction throughout is good,



the outside walls back plastered and plastered again on the inside with smooth white finish for papering. The second floor has one large bed room and one small bed room and three clothes closets. This house can doubtless be built in many localities for \$1,200. It is well suited to a narrow lot.

Design "B" 466 .

In this design we have an ideal plan incorporating many desirable features. The house stands with a broad face to the front, which is 31 feet 6 inches, and the depth is 24 feet; not a very large house, but giving an impression of spaciousness.

The living room is 11x23 feet and has an open fireplace recessed in a bay with French doors on each side, opening into a sun porch. Wide cased openings connect the dining and living rooms with the entrance hall. The kitchen and entry accommodations are very complete, with pantry, cupboards, and a work table built-in. The entry provides space for a refrigerator and the stair to basement leads down under the main stair with a grade door at the landing.

On the second floor is a large "owner's chamber" over the living room with a fireplace and with a boudoir or dressing room with built-in seat, wardrobe and extra lavatory. In addition, there is a guest room, servant's room and bath, all with closets and a linen closet off the hall.

A stair over the main stair leads to the small attic used for a children's play room, with a lavatory.

The basement contains a small den besides the laundry, vegetable room, furnace room and fuel bin. The foundation is concrete up to the grade with vitrified brick above, the walls are stucco over metal lath with shingle roof. The floors on the first floor are oak with oak finish, while maple floors with birch are used on the second. Estimated cost, complete, \$6,000.

Design "B" 467.

The bungalow illustrated herewith, which is 30 feet front by 43 feet in depth, exclusive of the porch, has just been erected in Los Angeles at a cost of \$1,600. With warmer construction and with a cellar and furnace adapting it to any climate, it will cost about \$2,000.

The exterior is covered with shakes or shingles at option of owner, and the porch and chimney work as shown in the picture is of concrete over rough brick work, or it may be entirely built of brick. The roof is shingled and the pitch of the roof is sufficient to stand any amount of rain or snow without leakage. The front porch is only a step from the ground, and requires no railing. There is an air of hospitality about the house which is fully carried out in its interior arrangement. The floor plan is so distinct that little explanation is necessary.

The living room has a bookcase built on one side of the fireplace and there is a coat closet which will be found very convenient opening out of this room. The dining room is a very light room and has a built-in buffet. The kitchen is built in full cabinet style with cupboards and closets well located. One chimney with two flues carries the kitchen range and can also be used for a furnace in the cellar or for a stove in the dining room. There are two good sized bed rooms with large closets and a linen closet.

Careful attention has been given to lighting and ventilation, and altogether this house should prove most attractive and convenient.

Design "B" 468.

What could be more attractive than this cozy bungalow with its cobblestone chimney, its walls of rough sawed boards, stained a dark brown, and its white trim, set among palm and pepper trees at the foot of a snow capped mountain, with possibly an orange orchard on the adjoining ground.

*Keith's Architectural Service.*

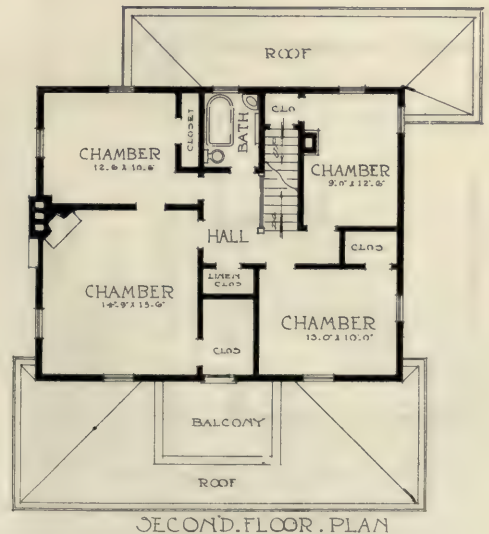
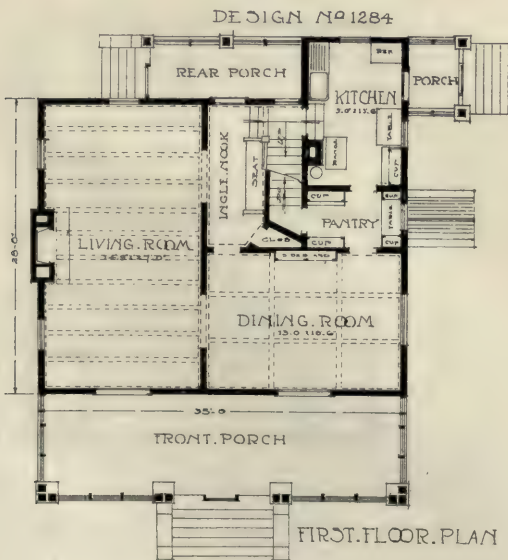
DESIGN B 464

A Great Deal for the Money

Without danger of heavy snow falls, the people of southern California, where the bungalows seem to have caught the eye of the moderate priced homebuilder,

yes, and even those more pretentious, are able to build on somewhat different lines than we are here in the north.

The cornice has an unusually wide pro-





DESIGN B 465

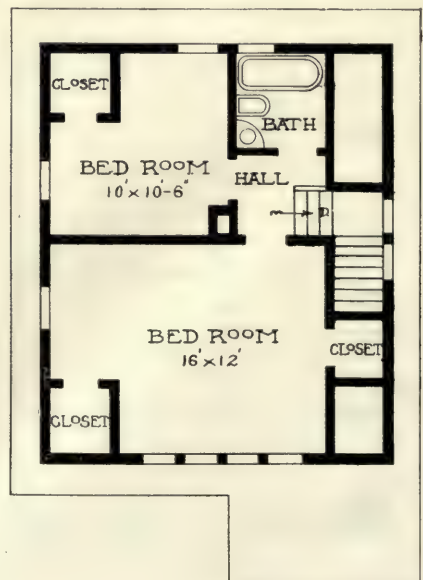
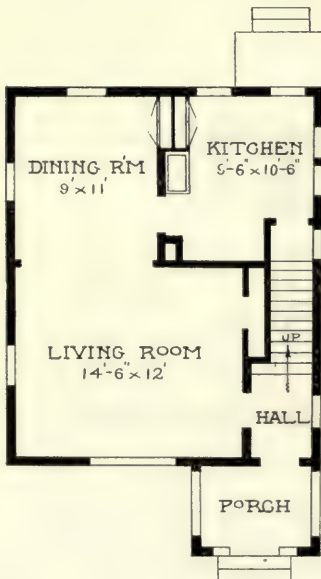
Chas. S. Sedgwick, Architect.

A Choice \$1,500 Cottage

jection; the roofs, almost flat, are covered with a prepared material of various shades, a light gray being the most popular color.

Here, even the shrubbery and flowers

have a better environment and are rarely blighted by frosts. The design in the illustration seems to have grown up, as it were, right out of the ground along with the shrubbery.





A. C. Clausen, Architect.

DESIGN B 466

Hip-Roof Design in Cement Plaster

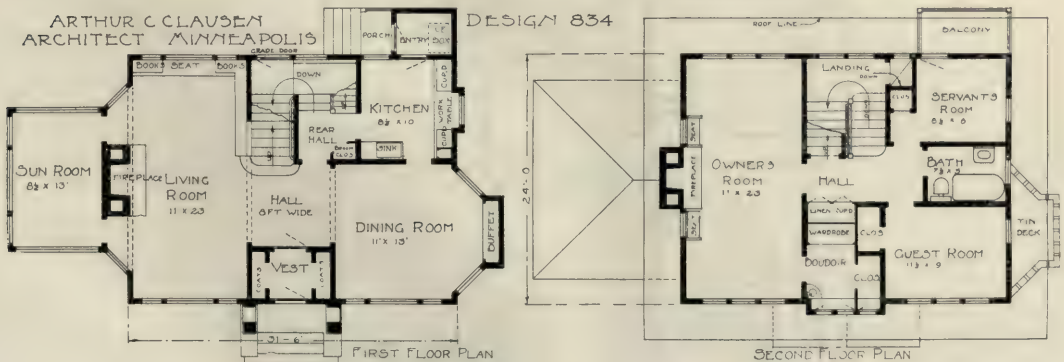
In the interior, no vestibule is required, so we enter direct into the living room, which has an attractive boulder fireplace and built-in seat. The kitchen has built-in cupboards and is convenient to dining room and front door. Three good sized chambers and bath open from a center hall, each having a good closet with two additional closets in the hall, one for linen and the other for a coat closet. French

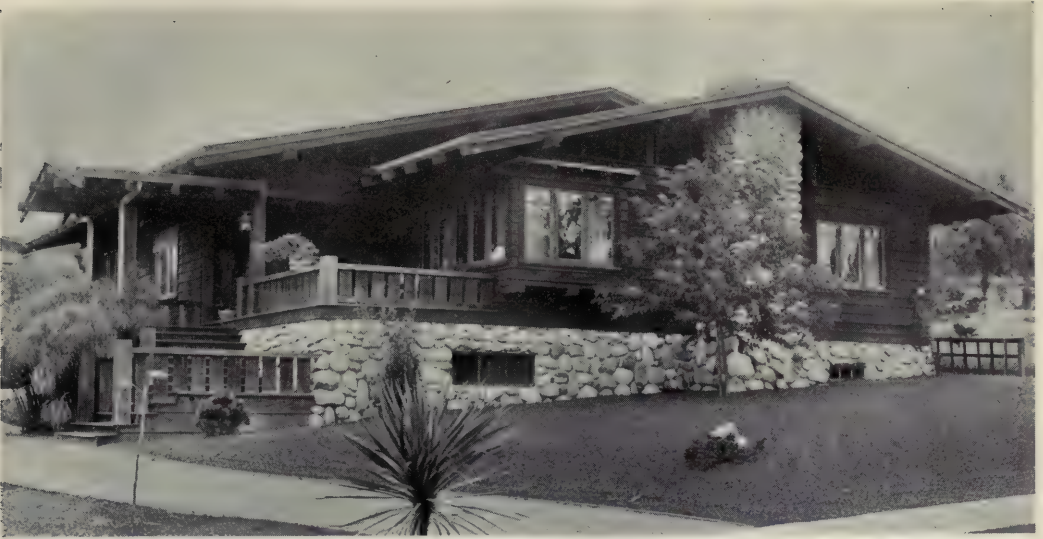
doors from two of the chambers open into an uncovered porch.

The woodwork is dark brown with walls of rough plaster, and beamed ceilings; the floors throughout are of hard wood.

Outside stairs lead to a small basement with laundry and storage space. A hot air furnace could be added if desired.

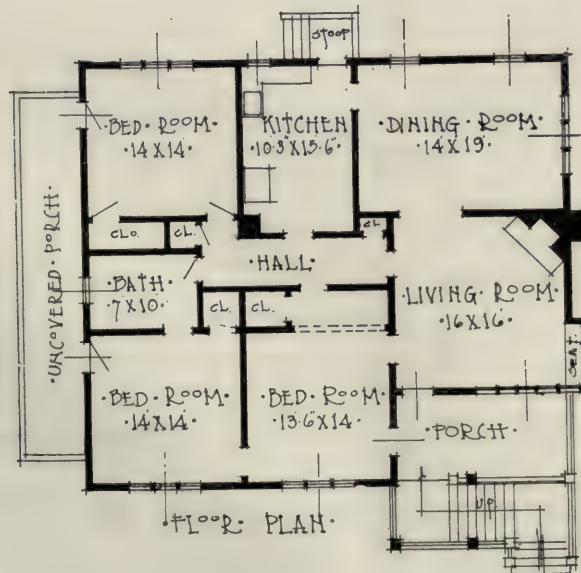
Estimated cost as built in California,





DESIGN B 468

An Attractive Combination of Shingles and Boulders

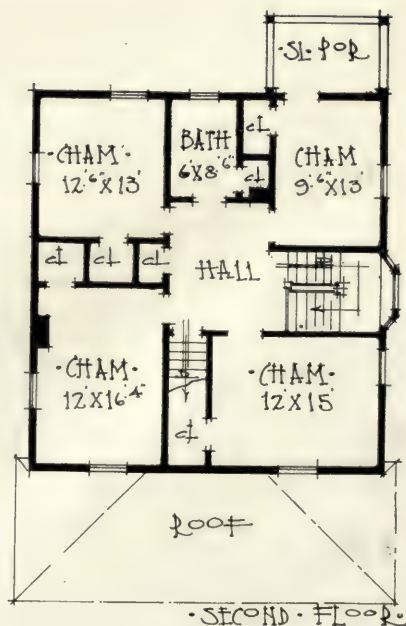
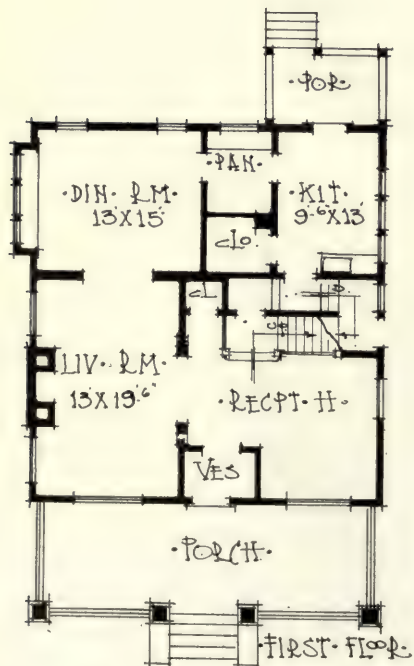




F. E. Colby, Architect.

DESIGN B 469

A Good House for \$5,000



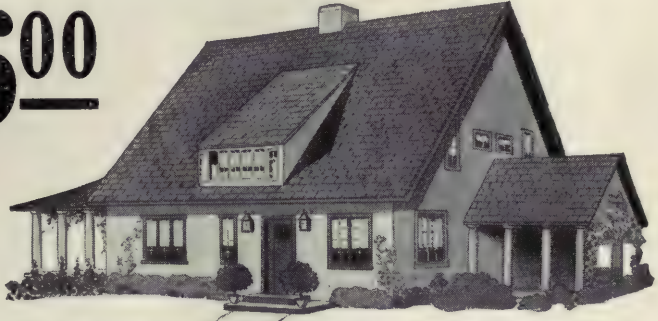
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Our Own Colonial.



OUR Colonial furniture, as far as it is to be distinguished from the English furniture of the same period, is characterized by greater simplicity, by the preference for curved rather than straight outlines, and by its large expanses of polished surface. Sofas with spreading arms and claw feet and backs elaborately curved are Colonial. So are pillared and claw-footed tables, and little sewing tables with lids, which raise to discover trays of many small compartments, and hanging bags of fluted silk. Bureaus, desks and sideboards often have pillars continued down the corners ending in claw feet, and have curving fronts, reminiscent of the French styles of the seventeenth century. Pomegranates and pineapples were common decorative motives, being used for the ends of bed posts and as parts of table legs. Some decorative motives were distinctly patriotic, like the eagle's feathers and stars found on the frames of mirrors. The banjo clock is native, so are several varieties of spindle back chairs, notably the effective Windsor chairs, with wooden seats and curving banistered backs. Secretaries, combining the functions of a desk and a bookcase, were made in large numbers by American cabinet makers, and though usually every simple, depending for their beauty upon the fine grain of the wood and the brilliant polish of their brasses, are still very desirable possessions.

The Furniture of the Brothers Adam.

The general lines of Adam furniture are not unlike those of Sheraton's, both being modifications of the style of Louis XVI, but while Sheraton is either white or red mahogany, Adam furniture is either painted white or made from satin wood, while

seats and backs are very frequently of cane. There has been a great revival of furniture in Adam style in the past few years, and most of that produced is painted with more or less elaboration in delicate colors. Flutings, turned legs and classic ornament are all characteristic of the Adams furniture.

Buying For Posterity.

The supply of antiques is of necessity limited, and is less every year. Leaving out the matter of a personal association, it is difficult to see why the well made reproduction of a fine classic design is not as desirable as the antique. And if it seem less so, one consolation is available, the thought that while the antique which was so earnestly desired would quite possibly have been on its last legs, the reproduction may gladden several generations after death has parted ourselves from it.

Prima Vera.

This name is given to white mahogany of the second quality, which is stained in brown oak and made up into bedroom sets. The color is not unlike Circassian walnut, but the grain is prettier, without the striped appearance of walnut. The cost is about the same as that of red mahogany.

A Color Scheme from Dendy Saddler.

The pictures of this artist are faithful transcripts of the life of the gentle classes in England, in the first third of the nineteenth century, and they are also rich in color suggestion for the decorator, as well as guides to the arrangement of rooms of that period.

One of his characteristic interior pictures is of an old lady in cap and flowered silk gown, seated in a winged chair covered with dark rose brocade. The walls of



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Architects see "Sweet's Index," pages 1004 and 1005.

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the room are papered, below a deep frieze in relief, with stripes of rose and cream and white fur rugs are on the parquet floor laid in little squares while across one corner is a cupboard filled with blue and white china.

Exclusive Designs in Printed Linens.

In buying printed linens, it pays to go to an exclusive shop and give the additional twenty-five cents asked per yard. One such shop has the verdure patterned linen mentioned a little earlier in this article, and side by side with it one with a deep tan ground overspread by a riot

pattern is so large and the fabric so decorative that a little goes a long way. Economy and good taste march in making rooms furnished in this style as simple as possible. Our modern confusion of pillows and bric-a-brac is singularly out of place.

The Function of the Drop Ceiling.

One thing which helps very much with a tinted wall is a rather deep drop ceiling, the tint of the ceiling carried down on the side walls to a depth of from eighteen to thirty inches. The proper depth depends upon the height of the walls and the po-



Davenport Designed to Use with Watteau Tapestries in Room Furnished in the French Style.

of flowers in shades of raisin, plum and lavender, with foliage in wood browns. A third linen has a confusion of small flowers in pastel shades of soft rose, blue and tan, with just the right touch of black to redeem the delicate coloring from insignificance.

Another shop shows linen distinctly French in style, one a dark old rose with irregular spaces of cream color defined by a scroll work and carrying bunches of small flowers. Another design has stripes of Louis Quinze blue, old rose or pale yellow on a cream colored ground, about four inches apart, with small sprays of flowers on the light stripes. Still other linens are accurate copies of eighteenth century crewel work, reproducing the stitches and the texture of the embroider threads. These are intended for use with the popular Jacobean furniture, with which they are in perfect keeping. The

sition of the door frames, and the drop and the side wall should be separated by a picture moulding, rather heavier than the ordinary if the drop is a deep one. This moulding should be slightly lower than the tops of the doors, never, the writer thinks, on a line with them, although opinions differ on this point.

The drop ceiling should, of course, be much lighter than the side walls, but a deep ivory is generally better than white or cream, and putty color looks well with blue or green side walls, while gray walls need a pure or grayish white, perhaps what is called the oyster shade.

Avoiding Monotony.

The objection to walls in monotone is that the room is apt to have certain sameness, without very much relief to the eye. This is the more conspicuous in a scantily furnished room, as the

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plain walls increase the apparent size of the room. For this reason the plain wall is to be avoided in a room furnished in the so-called classic styles of French origin.

The best way to counteract this monotony is by the introduction of more or less pattern in the furnishings and some contrast of color as well, although this last must not be too strong.

The well tinted wall is a good background for furniture of more or less elaboration, heavily carved, or of complicated construction. The spindled and cross-braced chairs of some of the Colonial models are well thrown out against a plain surface of brown, green, or gray, while the studied plainness of Chippendale or Sheraton would look meagre.

The Form and Making of Pillows.

Looking over the assortment of pillows offered by the best shops, one is struck by the prevalence of the long and narrow shape of the old-fashioned bed pillow. Whatever ornament is applied to these pillows is at the ends, a strip of some sort of bordering, and sometimes an elaborate fringe, the long edges being plainly seamed. Sometimes a pillow covered with brocade or silk tapestry is edged all round with a narrow fringe, and cretonne pillows have an edge of fringed gimp.

For most square pillows a cord is used, unless the flapped finish is liked. For this the two sides of the pillow cover are hemmed and laid together, right sides out, and a line of stitching is run around three sides, about an inch from the edge. The pillow is pushed into the open side and the opening closed with another line of stitching.

Some very good-looking pillows are made from the cream-colored Anatolian curtains, the pretty knotted fringe being used for an edge. One of these to lay one's head upon is far more serviceable than the rather fussy lingerie ones.

Novelties in Fireplace Fittings.

Whether in a mountain camp or a city house there is an alluring sound in the kettle boiling merrily over the coals, and crude as the method may be, tea made in

this way is apt to have a distinctive flavor, imaginary or otherwise. For the accommodation of the kettle when it is taken off of the fire there is a metal stand with a hinged top that may be had in either brass or iron to match the other fittings of the fireplace. The stand is about a foot high and the top is openwork in an ornamental design. When not in use it can be turned down and the stand placed in an unobtrusive corner, or kept on the hearth with the other fireplace accessories.

Of further assistance in the boiling of water over the coals with the least amount of trouble is a small metal trivet that keeps the kettle in position on the fire. It is circular in shape and quite heavy, with a substantial handle and a strong iron spike underneath that is thrust into the coals, making the trivet perfectly steady. Like the kettle stand the trivet is to be had in either wrought iron or polished brass, and, in spite of its homely use, is quite ornamental in appearance.

The Color of Shades.

Just at present the fashion is for white shades, at least in the east, the preference being given to striped Holland, and as a rule a second set of dark green is provided. This is a considerable burden on a limited purse, and both good taste and economy are on the side of a single set of some neutral color. The best choice is perhaps a rather light greenish tan, but when a house has a very sunny exposure a soft olive is agreeable and comfortable. Of course all the shades should be of the same color and absolutely plain. If two sets are used the darker ones should be in the inside and care should be taken to keep the two sets at exactly the same height, unless the dark ones are rolled entirely out of sight. Few things are uglier than a house with the windows striped with bands of green and tan, due to the unequal height of the two shades from the sill. Here comes in the advantage of the olive shade, dark enough to soften the light, yet not excluding it altogether.



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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Period Furnishings.

G. G.—“My new home consists of a living room, 22x14'6", with French doors opening into a music room 14'6"x14'6" (these two rooms across the front), and dining room, 18x13'6", with French doors from living room. Shall I have these three rooms one color (wall finish), and what kind of upholstering shall I use? The woodwork throughout the house is white enamel, with mahogany doors. All of my furniture I have yet to furnish except a dining room set I already have, very handsome Flemish oak. I have a seven-foot Davenport that I could have done over. It is colonial and very pretty, but could only use it before living room fireplace, as have no other seven-foot space in that room.”

Ans.—Without the faintest idea of your floor plan, except that there are French doors, etc., it is difficult to give definite suggestions for the second floor.

With ivory woodwork and mahogany furniture we should advise cool gray wall tones for the south living room, with rug and draperies in rich but soft blue. A gray wall also in music room, with much rose mixed with some blue. The mahogany doors are excellent. Nothing can be better than the seven foot davenport upholstered in rich deep blue velvet at \$3.00 a yard, and placed in front of fireplace, with a long narrow library table backing up against it.

We certainly should not advise you to attempt period furnishing. It is rank folly in ordinary homes.

Color Scheme for Bungalow.

E. B. C. asks for color scheme for ground floor of house of bungalow type. She wishes to use oak dining room furniture and has a walnut piano for the parlor. The living rooms are on the north

and east sides of the house. The side walls are twelve feet high and the rooms have wood ceilings.

Ans.—As your parlor, living room and dining room are so closely connected, opening out of each other, it would be desirable to have the finish of the woodwork nearly if not quite the same in all three. The best selection will be brown oak, the color of the Jacobean furniture, sometimes called baronial. This will answer with your walnut piano in the parlor and with your oak dining room furniture. The black woodwork, which you suggest for your living room, is seldom successful in an ordinary house. It is only suitable for rooms in some unusual style or color scheme in which the black is needed to harmonize a variety of colors.

As your rooms are so high, you should use papers with an all-over conventional pattern, rather than stripes. Have a green paper in the dining room, which is so sunny and well lighted, golden brown in the living room and a warm tan in the parlor. For the kitchen have painted walls in greenish gray with light oak woodwork.

In the bathroom have a white painted dado with either gray or light green above, unless you prefer a tiled paper. I should use white woodwork in the bedrooms and floral papers below white drop ceilings. In the larger bedrooms use an all-over floral paper, in the smaller one a paper with small wreaths or bouquets on a light ground.

Scheme for Remodelling.

Bates.—We intend to tear down a partition between our parlor and sitting room this spring making a living room, and write to you for advice as to decorating and furnishing same. I enclose a rough sketch of the proposed room. You

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ANSWERS TO QUESTIONS—Continued

will note that every window is shaded by a porch hence we will need a light interior to balance lack of direct sunlight. The woodwork is at present a dark oak and we propose to enamel it white. The floors are birds-eye maple. We have two Wilton rugs 9x12 and 8'3"x10'6", one a mixture of light browns, the other a deep red with plain center. Our furniture is for the most part mahogany with two oak and leather rockers.

Now for some questions:

1 Shall we enamel the woodwork white?

2 Shall we place some beams crosswise of the ceiling in white?

3 Shall we have a red brick fireplace?

4 What color wall paper and how applied?

5 What style curtains for windows and drapes for doors?

6 What sort of electric fixtures?

7 What style of glass for windows?

8 Shall we have leaded doors for white book shelves?

9 What color leather cushions for proposed oak davenport?

Ans.—In reply to your questions; taking the last one first, in view of the awkward shape the room would be if thrown in one and in view of the difference in rugs, we do not advise removing the partition. We are returning your sketch with suggestions in pencil as we should treat it. We presume the partition to be on line with the "jog" in west wall and we would simply cut a wide 7 ft. opening in this partition. This would practically throw the rooms together, at the same time separating them enough to allow of different woodwork in the two rooms. You do not say which of the rugs is the larger, but at any rate, we would place the dark red rug in front room and do over the woodwork cream or ivory, not white, enamel. We would leave the oak as it is in back room with the brown rug and put the oak pieces of furniture there. The oak finish should extend through the arch to parlor side.

We would make a sort of parlor of the front room putting the mahogany pieces together there. The davenport under south window is an excellent idea; it should be either mahogany or wicker. The wicker ones are extremely pretty

when cushioned in a pretty English print or taffetas and as mahogany is not so good with red, we would advise the wicker with a couple of wicker chairs upholstered the same. Make the west window into a French door and the high casement on east as you propose. Your dark dingy room will be transformed.

The mantel can be either white or mahogany with soft grey, not red brick facings and the wall a texture fabric paper in soft greys with hint of dull red. Ceiling beams would not be appropriate. Just an ivory tint on ceiling. The back room would then be treated in warm soft browns, making the north end a pretty nook lined with book shelves with growing fern in window. Do not make a pillar for light. The tall piano lamps are again in vogue.

Color Scheme for Craftsman Interior.

E. L. S. asks for a color scheme for a one-story house, on Craftsman lines. The woodwork of the principal rooms is stained brown, the ceilings are beamed and the floors are hard pine. The living room has a stone fireplace and the furniture for it and the dining room and one bed room are Craftsman, the rugs Indian in dark reds, black, green, blue and tan.

Ans.—With the general style of your house and the deep rich tones of your rugs, sand finished walls, tinted in strong tones of color, will be more effective than papers. I should judge from your plan that your dining room received very little direct sunshine and should advise you to use a strong yellow for the walls. You will find very good tones in the finish you mention. For the adjoining living room use a deep shade of golden brown, harmonizing with the yellow of the dining room. I am enclosing samples which will give you an idea of the coloring.

For your Craftsman bed room, which I think should be the south-east one, use a light shade of old red. Do not use a large rug in this room, but two or three small ones, at the sides of the bed and in front of the dressing table. You can get Smyrna rugs which copy very closely the old reds of the Bokharas. Or you can get velvet filling in a very beautiful old red. You can carry out the color scheme further by furnishings of a Morris cre-



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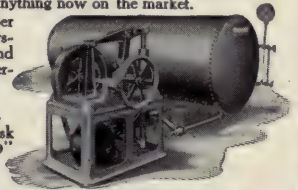
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tonne in old reds and cream color. These cretonnes are very artistic and also durable.

For the bedroom, for which you have the green rag rug with border of pink, white and green, have white woodwork and a gray green wall, with bedstead and bureau of white enamel. Use for bedspread, covers and cushions a cretonne with a well-covered pattern of pink flowers and green leaves, something with definite color, but soft in tone, and chairs and a table of wicker in a light gray green, and you might repeat the pink of the cretonne in different parts of the room.

I see no reason why you should not have a white kitchen, or why it would be out of harmony with the finish of the house, with your fumed brown woodwork your floors should be stained as dark a brown, if not darker. You will need one coat of stain and three coats of any good floor finish, the last one rubbed down with powdered pumice stone and crude oil. This looks as well as a waxed floor, is not slippery and does not spot with water. The kitchen floor should be treated with boiled linseed oil, followed by a coat of linseed oil and crude oil in equal proportions. If it is gone over once a week with a woolen rag dipped in a mixture of crude oil and kerosene it will acquire a beautiful tone in a few months.

For the stone fireplace in the living room I should advise carrying the stone straight up to the ceiling, with a shelf of fumed oak, supported by heavy wooden brackets.

Changing the Wood Finish.

F. L. is building a house, the living rooms facing north and east, hall and library connected by a beamed opening. The finish is oak throughout, the fireplace is brick with built-in bookcases on each side of it. The dining room has a bay window facing east. Part of the windows are plain, part of them leaded. The walls are in rough gray plaster. She asks for suggestions as to rugs and furniture

and the treatment of the woodwork, also for the completion of the furnishing of a den, facing east and south.

Ans.—Naturally any stain sinks into the wood and gives it a permanent color, but stained woodwork could be cleaned off and enameled. If at any time you should wish to have the woodwork made darker that could be done. Of course a radical change in the finish of your standing woodwork is always a matter of considerable expense. You will find a medium brown stain, nut brown or Old English, more likely to harmonize with all sorts of belongings than the fumed tone, and it will look well with your rough gray plaster walls. As your living room and hall are practically one room, the woodwork and floors must have the same treatment, the floors stained a little darker than the standing trim. For the brick of the fireplace use brown tones a little lighter than the woodwork.

In the den, with your rug in red and bright green you cannot have much strong color. Get curtains of raw silk or Sun Fast in dull olive and a couple of chairs in olive green wicker with cushions of the same color. Then you can have a settle table either round or oblong, stained green. Have plenty of cushions on your black leather couch, some red, some green and some in figured material combining the two colors.

One of the most satisfactory electric fixtures is a half sphere of translucent glass, set in the center of the ceiling, which is flooded with soft light when the current is switched on. I would suggest these for the dining room and the living room, with a portable lamp of some sort for the library table in the living room, and possibly a side light in each of the front corners of the room. In the den have two side lights, one of them over the head of the couch. The simpler electric fixtures are, and the less they call attention to themselves the better, but it is desirable that the plain glass bulb should be entirely enclosed by one of translucent glass, for the sake of one's eyes, as well as for looks.



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Hindrances to Household Efficiency.

An authority on domestic science has been investigating the ways of the average housekeeper with a view to determining in what ways she loses time and wastes strength, and has grouped the hindrances under six heads.

First is the loss of time in fetching and carrying materials and utensils in cooking. Closets are too many and too scattered, the refrigerator too far from the kitchen table. This difficulty is easily remedied by the use of the kitchen cabinet and by putting the refrigerator in the space set free by the installation of the cabinet. Many people find a kitchen cabinet too expensive, but at the Teachers' College in New York, they have improvised one from packing boxes which, at a nominal cost, answers every purpose.

Second is the fatigue caused by tables and sinks, either too high or too low. One great advantage of the gas range is that one can cook on the level. The vacuum washer, which has often been mentioned in these pages, is a utensil which obviates stooping over a tub or washboard, and which saves many an aching back. People who live in rented houses cannot regulate matters of this sort for themselves, but every woman who has anything to say about building a house should insist upon sink, range and set tubs being at a convenient height. When no modification is possible, something may be done by supplying the kitchen with one or more high stools so that ironing and dish washing can be done in a sitting posture.

The third difficulty is working with the wrong tool or with tools in poor condi-

tion. Most kitchens are well equipped, but no care is taken to keep tools in good condition. A whetstone and an oil can should be at hand, and each utensil should have its own nail at a convenient height, over table or sink according to its special use.

A fourth cause of waste is the loss of time in shifting from one process to another, this applying principally to cleaning. It is always best to clean several rooms at a time, sweeping each in turn, then washing the windows of all, lastly doing all the dusting, "getting your hand in" with each process.

The fifth difficulty applies to the purchasing of supplies. Much delay is caused by the running out of one article or another. Sugar, flour, or eggs are not at hand and cooking must be delayed while the purchase is made and the whole day's work is thrown out. There should be a regular system of purchasing supplies and of checking off each article as it is used up. In this same line time can be saved by planning the bill of fare for a few days ahead.

The sixth hindrance is one which would only occur to a trained observer, that is the inconvenience resulting from the use of movable utensils. The coffee mill attached to the wall involves much less exertion than the sort which is held in the lap. To have a chopping bowl or the receptacle of an egg beater clamped to the table is a simple matter and a substantial saving of labor.

Other hindrances than these will probably suggest themselves to individual housekeepers, but careful analysis of existing conditions will show the importance of this classification. An evil can

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be remedied only after it has been apprehended and certainly the business of housekeeping in its present state leaves much room for improvement.

Avoiding Repetition.

One of the shortcomings of the average housekeeper is that she plans her work so poorly. She does not seem to know how to kill two birds with one stone. Many years ago Mrs. Diaz wrote a clever little book, called "Anna Maria's Housekeeping." It was published in one of the juvenile magazines as a serial, and was an extremely good manual of simple housekeeping, and is quite worth hunting up and reading. I always recall a characterization of Anna Maria's efficient sister, of whom it is said that order accompanied her in her progress across the kitchen floor, as she replaced a chair and straightened a mat and took exact cognizance of a dozen details. It is a capital thing to save motions, and the economy of motion has been the subject of much study in experiment stations, but it is quite as important to decrease the number of processes required. Especially does this apply to cooking. Given ice you can make up pastry for two bakings at one time. You may cook two quarts of potatoes and have them mashed today, creamed tomorrow and fried the day after. Today you have spaghetti au gratin,

using the liquid in which it was boiled to moisten it. What is not eaten will be good a couple of days later heated over in tomato sauce. If you have any skill in the management of left-overs, it is far better to buy a large roast and get four meals from it, rather than the tiny one which will barely go for twice. Two or three heads of lettuce pulled apart, washed and put into a cheese cloth bag, which is wet each day and laid on the ice will last in good condition for days and save a lot of trouble when a salad is wanted. Mayonnaise dressing, always a bother to make, will keep for two weeks, and I, myself, have kept a jar of consommé nearly three weeks in a very cold refrigerator. The next time you make cake, use less eggs and more butter and double the rule. As soon as one of your loaves is cool wrap it in waxed paper, then in a napkin and put it away in a tin box. If it is what the small boy called "good" cake, it will be perfectly good two weeks later. The more butter in a cake the better it will keep. Most people are slow to learn that butter is the telling ingredient in cake. Old fashioned cooks used a great many eggs, because they did not have baking powder and it took at least four eggs to raise a cup of butter, with Providence on the side of six. A cake with a large proportion of eggs dried very quickly, and a sponge cake is hopeless after two days.

Cotton Bath Mats.

Some new bath mats have the merit of being dark enough to avoid the spotted look of most of the very light-colored ones. They are of cotton chenille, woven hit-or-miss in shades of blue, gray and brown, and have poster ends, a bit of shore, with rocks and a lighthouse, and are really very effective, though best adapted to the blue bathroom. They cost \$1.25.

Graham Toast.

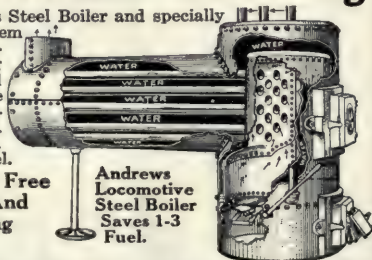
Hot, well buttered, graham toast, with some sort of jam or jelly, is a capital lunch for children, and it is a good plan to make a loaf with baking powder specially for the purpose, baking it in a long, narrow tin, closely covered, so that a hard crust will not form.

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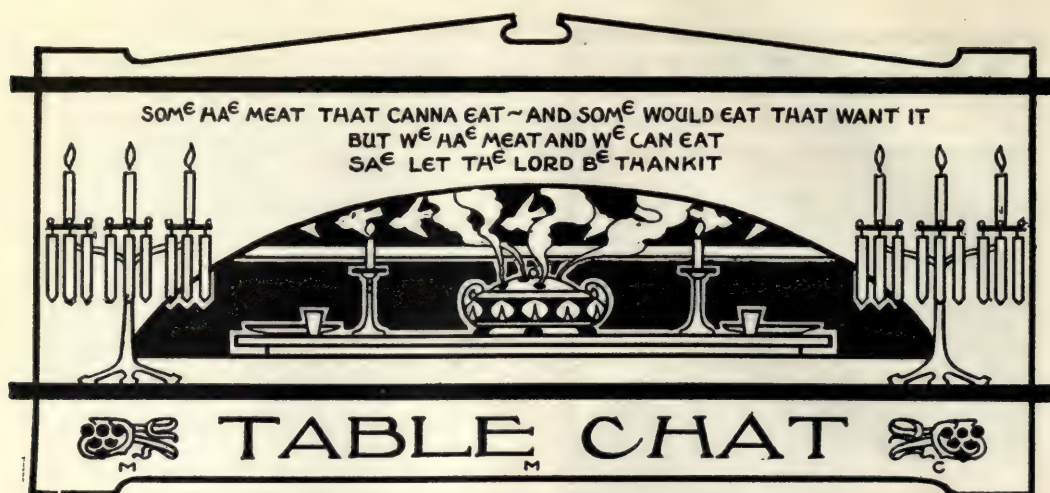
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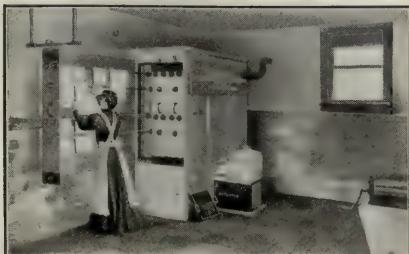
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TABLE CHAT—Continued

able purchase, as such turkeys generally sell for less money, because the demand is less and the proportion of flesh to bone is greater. Every fragment of such a turkey can be utilized in some appetizing way. If so much turkey falls upon the family taste, the remains can be potted and be a useful addition to the emergency shelf in the pantry, while the bones will yield a quart or more of stock which

French chestnuts, boiled and mashed, mixed with a cup of cracker crumbs, two tablespoonsful of butter, pepper, salt and a little chopped parsley. This is enough for a small turkey. The butter should be worked to a cream before mixing, as the flavor is better than when it is melted. Melting butter is a short cut only to be excused by desperate haste.

A simple and very good stuffing is



A Little Novelty for the Christmas Dinner Table—Baked Tomato with Corn Cream Filling.

added to an equal quantity of oyster liquor will give an extremely good soup.

Stuffing the Turkey.

The regulation way is to stuff a turkey with bread crumbs highly seasoned with herbs and well moistened with butter, but a good many improvements may be made on this filling. If oysters form no part of the menu, they may be used in the stuffing substituting hot oyster liquor for boiling water and mixing in the oysters cut in halves or thirds. In this case the sage and thyme should be omitted and only pepper, salt and celery seed used for flavoring.

The chestnut stuffing beloved of epicures is made from a pint of the large

made with equal quantities of bread crumbs and sausages. Cook the sausages crisp and brown and run them through the meat grinder, before mixing with the crumbs, with a small onion. No seasoning will be needed except a little salt. Some people brown the crumbs in the sausage fat. Moisten the dressing with hot water.

Garnishing the Turkey.

The turkey in our first illustration lifts his crisply browned sides from a bed of celery, and bunches are attached to various parts of his anatomy with tooth picks. This celery garnish may be varied by slices of very solid cranberry jelly laid at regular intervals on the leaves around



Residence of J. E. Wing, Mechanicsburg, O.
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"The house is framed in the usual way, and sheathed solid with hemlock boards, put on over Sheathing Quilt nailed to the studding."—Country Life in America, March, 1907.

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TABLE CHAT—Continued

the edge of the platter. If water cress is available it makes a pretty garnish, and it or parsley may be alternated with the white leaves of celery.

English people think an accompaniment of either bacon or sausages essential to the proper service of a turkey, and crisp slices of the former may surround the platter and be served to those who care for them. Another garnish consists of a double ring of sausages, rather small ones, the connecting string being left, the sausages lightly pricked and cooked in deep fat. If any are left over they can be plunged again in the fat, or heated in the oven the next day. Two pounds or two and a half will be needed, according to the size of the platter.

Mince Pie for Just Once.

Few people in this day attack mince pie with the cheerful courage of our grandfathers or even of our fathers, and the huge earthen crock of pie meat hardly finds a place in the modern pantry. But it is a very simple matter, with the aid of the meat grinder to put together a pound of beef, a cup of suet, a quart of apples and the necessary fruit and spice. Mix the mixture with cider, cook till the apples and raisins are soft, finish with a wine glass of brandy and have filling for two or three pies. The puff paste cases supplied by the baker or caterer simplify the matter still further. If suet is considered too indigestible substitute an equal quantity of creamed butter.

Plum Pudding and a Substitute.

While it is not the traditional way, the making of English plum pudding may be greatly simplified by putting all the solid ingredients through the grinder. One ingredient of the English article, candied orange peel is often missing from ours. Some English cooks use instead an orange, chopped up, pulp and rind, first removing the white pith and inner skin.

To the writer's mind, the good old fashioned way of serving vegetables should be en regle for the Christmas dinner. But lest there be those who thing otherwise, we give a novel and very attractive way of serving.

Baked Tomato with Corn Cream Filling.

Remove pulp from six ears of sweet corn, season with salt and pepper, add beaten egg. Cut the top off of tomatoes, remove a greater portion of the top, dust lightly with pepper and salt, and fill with corn. Serve with beaten white of egg, and strips of toasted bread.

The woman who gives dinner parties or entertains a good deal in other ways, and wishes to do things according to the latest fashion, will find a recently issued book useful. It is "The Hostess of To-day," by Linda Hull Larned, and covers a wide range of eating and drinking. It is not a book for the beginner and the receipts are intended for the skilled cook who can read between the lines, but within its limits it is a really valuable book.

For the simpler sort of entertaining, afternoon teas, card parties and the like the little book of the lady who calls herself Dame Curtsey is helpful and not extravagant.

Winter Salads.

Most of us like to have some sort of a salad as a part of our principal meal, but when winter has set in it is not always easy to get the materials. If lettuce is out of the question finely shaved cabbage is very good. Dried Lima beans taken from the fire before they have had an opportunity to burst their skins are good with oil and vinegar or with mayonnaise, and so are canned string beans. A can of mixed vegetables can be used for a salad with celery and the frying tomatoes go a good way as a salad. A ring of tomato jelly filled with cold slaw is extremely pretty as well as good to eat. Another jelly salad is a mould of unsweetened lemon jelly into which chopped cucumber pickles have been stirred. Unsweetened orange jelly, made very stiff and cut into blocks should be laid on the white inner leaves of lettuce and served with mayonnaise and tiny balls of cream cheese and chopped nuts. A standby which is always available is a large banana roll in mayonnaise, then in chopped peanuts or walnut meats and served very cold with more mayonnaise, which should be made with lemon juice instead of vinegar.

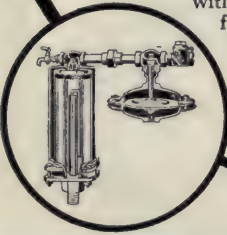
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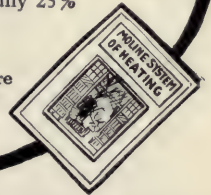


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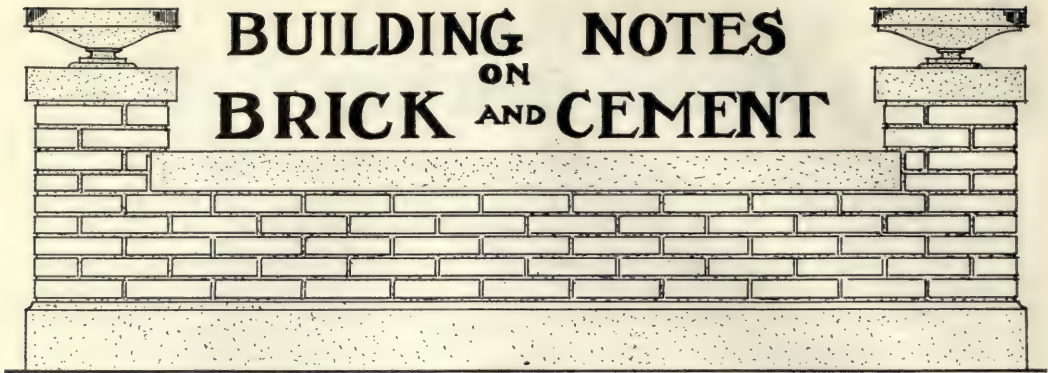
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SO much interest is aroused in building quarters by the successful operation of Hollow Wall Concrete Machines and the greatly lessened cost of walls built by this process, that we reproduce in this depart-

the example before us the entire building and grounds were laid out in northern Italian style of country houses. The outer walls are tinted old rose, and the roof is a green Spanish tile. The interior is very simple, with fire-proof construction



North Carolina Residence in which Hollow Wall Construction Was Used with Very Good Results.

ment a view of a North Carolina residence in which this form of construction was used for the walls by a Boston architect. Such a residence, so full of beauty and architectural charm, is a surprise to most people, whose ideas of machine-made walls are limited to exceedingly plain—not to say ugly—structures. In

to a large extent; the main partitions are of concrete and the floors on the first story are cement and tile. The greater part of the wall surfaces are tinted plaster, and the fire-places are mostly cement with colored tiles inserted. There is very little wood trimming, except with the built-in book-cases and window seats.



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are cool in summer and warm in winter, offering all the advantages of stone or masonry, at the cost of wood.

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shows even in the design of your home. You may have heard some one say, "That's Brown's House. Isn't it just like him?" No matter what your tastes may be, you cannot get away from the fact that a white stucco or concrete surface is most pleasing and harmonious. It indicates a rapidly increasing tendency toward simplicity in architectural treatment.

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BUILDING NOTES ON BRICK AND CEMENT—Continued



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are stucco successes.

KNO-BURN Metal Lath is proof against moisture, decay and plaster acids. It is made with a mesh that the plaster is *bound* to stick to. It is simple to apply and its use is a real economy.

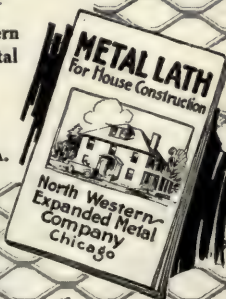
Stucco that is laid on **KNO-BURN** retains its smooth beauty long after it has ceased to be new.

Let us send you our Booklet for home-builders. It is full of valuable information about **KNO-BURN** and wall construction in general. Write today for Booklet No. 655.

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A Warm Question.

Many automobiles are ruined or damaged every winter by being kept in cold garages. Heretofore garages could not be safely heated except at great expense, but now, since the invention of the Superior Safe Garage Heater any person may easily heat his garage satisfactorily, economically, and safely wherever natural or artificial gas is found.

After lighting once it need not again be lighted during the cold season, as a small pilot-light burns constantly after the heater fire has been extinguished, but the amount of gas so consumed is too small to affect a meter. A neat mica window in the door covered with safety wire gauze enables any person to see the glowing fire inside.

No gas heater of equal size has ever been invented which can compare with this one for heating qualities, yet it will not blister or mar the finish of any machine, however near it may be.

This wonderful furnace will prevent the freezing up of radiators and other parts of a machine, and in so doing may easily effect a saving of many times its own cost.

Repairs can be made and machine cleaned without discomfort in the severest weather as the garage can easily and quickly be made comfortable by simply turning the valve handle. The dangerous match has no place in a garage heated by this invention.

No time need be wasted in getting a quick start when this heater is in use for the ignition will not fail when the garage is properly warmed. Your machine requires a warmer shelter than any animal because the creature is supplied by nature with bodily heat, while the metal parts of your auto are the coldest things on earth when it is kept in a frigid garage.

As the heater is only 12 inches wide by 40 inches long and 33 inches high, it occupies little space. It is provided with four feet which raise it six inches above the floor, but it can be set upon brackets at the option of its owner.

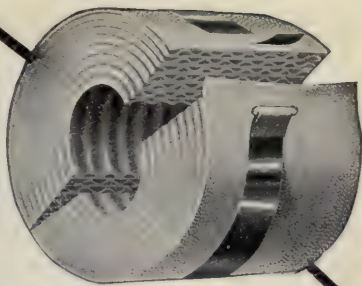
It is as easy to set up and install as a common gas stove.

The price of the heater is only \$20.00, at the factory.—*The Builder*.

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Engineering tests prove that, at \$4.00 a ton, it costs \$154.00 a year for coal to deliver steam through 500 sq. ft. of pipe covered with ordinary air-cell covering; whereas the same heating effect can be produced for \$113.50 (a saving of nearly 26%) where the pipes are insulated with J-M Asbestocel Pipe Covering.

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is made of corrugated asbestos felt built on the arch principle—see illustration. The air cells run *around* the pipe, forming a series of *sealed rings* of "dead air." In ordinary air-cell coverings the air cells run *lengthwise*, allowing free circulation of air and consequent radiation of heat.

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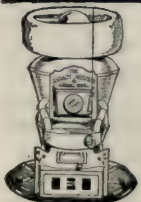
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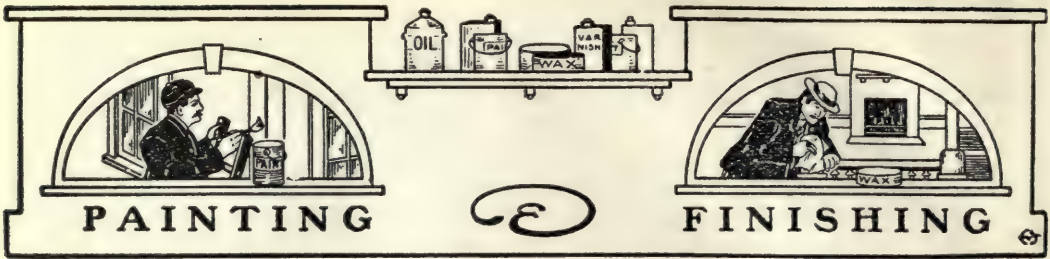
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Paint Protection and Its Economy.

Extract from a Paper by Henry A. Gardner, Assistant Director The Institute of Industrial Research, Washington, D. C.

THE preservation of structural materials, which may be obtained through the application of paint, constitutes a most vital means of furthering the conservation of our natural resources. It is, moreover, the most economical method of sustaining the appearance and general up-keep of any community.

"A structure coated with sheets of India rubber would not be as well protected from decay as a structure coated with a good oil paint. This is due to the fact that a sheet of India rubber is not nearly as durable or as waterproof as a thin dried film of properly prepared paint. The latter material, when applied, dries to a continuous elastic film containing finely divided particles of metallic, wear-resisting pigments. A square yard of such a film upon a wooden surface costs approximately but a penny, yet it will beautify and protect a dollar's worth of surface for many years. This is a low rate of insurance.

"Dwellings, barns, outbuildings, sheds, posts, fences, stock enclosures, wagons, implements, windmills and other structures, whether of wood, iron or cement, should be preserved from rapid decay through the use of paint. High-grade prepared paint made upon a lead and zinc base, with or without a moderate percentage of inert pigment, may be used successfully for all such purposes. Colored paints will be found the most serviceable, the coloring matter in the paint adding from two to three years to the life of the coating."

A valuable addition to the finisher's repertoire, is the new cement coater, put

out by the Acme White Lead & Color Works, Detroit, Mich. It is specially designed to counteract the tendencies for "powdering up" of cement surfaces especially of floors. It comes in several artistic colorings also ivory and white, and imports a hard, smooth, durable surface easy to keep clean.

The priming coat for new wood is the same for both interior and exterior. But different woods require different treatments. Thus, the priming coat for white pine would be different from that intended for cypress. Usually interior cypress work is varnished, finished by the hardwood finisher. But on the outside it is usually painted.

The best pigment for priming wood is pure finely ground white lead, and pure raw linseed oil is the best thinner. The priming may be heavier than that for exterior work, and is intended to serve as a filler. If yellow pine or cypress interior work is to be painted, then it is best to add considerable benzol to the paint, some using it entirely. The 160 degree benzol, solvent naphtha, is the kind to use, or turpentine may be used in its place. Oil acts very badly on cypress, and on hard pine fails to secure a proper hold. Benzol and turpentine are penetrating, and the paint mixed with it for priming will stick well. Also benzol, and in a measure turpentine also, is a preventive of mildew. It must not be used in any coat following the priming coat.

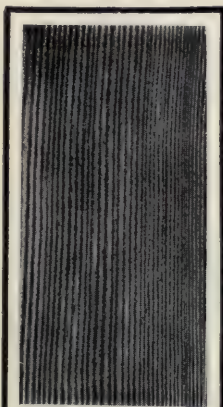
White pine knots must be shellaced with thin white shellac varnish, two coats on the bare wood, some advising coating on the priming coat. Shellac cut with pure grain alcohol is best for this purpose.

Use a partly worn brush for putting on the priming coat, as a new brush will not admit of an even application. Use too a round or oval, never a flat wall brush.



Did you ever see a more beautiful wood than this? It is Douglas FIR "trim"—for all interior woodwork, sash, doors, chair rails, base-boards, cornice, mouldings, stair rails, newel posts, paneling, etc.

For all such purposes it is "the Aristocrat of Woods."



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also called "Vertical Grain" and "Rift Sawn." A dense, fine non-splintering flooring. Its remarkable resistance to wear is proven by long service it gives for shipping platforms, freight house floors, factory floors and similar uses where heavy trucking is done.

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Douglas FIR Lumber

gives superior service. The United States Government, in Forest Service Bulletin No. 88, issued June 17th, '11, says: "Douglas FIR may, perhaps, be considered as the *most Important of American Woods*. (★) As a structural timber it is not surpassed, and probably it is most widely used and known in this capacity."

★ *WHY does the ultra-conservative Govt. Report thus describe Douglas Fir?*

The *reason* for the superiority of Douglas FIR for building purposes is that *in proportion to weight* it is the

Strongest American Wood

U. S. Government tests show that with an air-dry weight of only 33 lbs. per cubic foot, Douglas FIR has a strength parallel to its grain of 3500 pounds, per square inch.

This great strength with light weight, makes Douglas FIR the ideal wood for all framing purposes, from the studding and joists of a cottage to the beams and columns for large mill-construction buildings. Moreover, Douglas FIR is as beautiful as it is strong, and is therefore as desirable for interior finish as it is for structural use. The "watered silk" effect of its singular

grain is most pleasing, and its texture is adaptable to any finish.

The U. S. Government Bulletin quoted above also says: "Douglas FIR sawed 'flat grain' shows pleasing figures and the contrast between the spring and summer wood has been considered *as attractive as the grain of quarter-sawn oak*. (★) It takes stain well, and, by staining, the beauty of the grain may be more strongly brought out and a number of costly woods can be imitated."

(★ *Quarter-sawn oak costs about two and one-half times as much.*)

You will appreciate a copy of the booklet on "Douglas FIR—Its Value to Builders." It is free. Put your name on a postal. Also put on your address. Then mail it. (You'll be glad you did.)

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Renders a service each year worth many times its cost. Saves many steps. Prevents extremes of temperature. Insures less fuel. The standard for over 30 years. Lasts a lifetime.

Two styles of clock attachment: Model No. 60—8-day clock. Model No. 47—1-day clock.

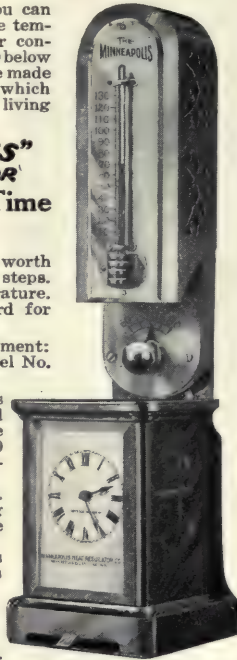
The clock attachment enables one to secure automatically and silently a change of temperature at any set hour. Model No. 60 (same as illustration) shows 8-day clock.

Used with any heating plant. Sold and installed by heating trade under positive guarantee of satisfaction.

Write for booklet. Shows models, explains details, gives prices.

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Attractive, durable, fire resisting, no nails exposed, easy to lay, beautiful dark rich red or green, plain or with hexagonal pattern, moderate priced. Are you interested? Write us for particulars.

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TRADE MARK
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Putty up on the priming coat, making your own putty from white lead in oil and some whiting, with a trifle of good rubbing varnish, to toughen it. A few drops of turpentine will harden the putty. Such a putty will dry sooner than common store putty, is white, and sandpapers well. Store-putty would show up under five coats of pure white paint. Besides which there are some times when you need to glaze a place with the putty, to bring it up to a level, and this white lead putty will do that, and the other will not.

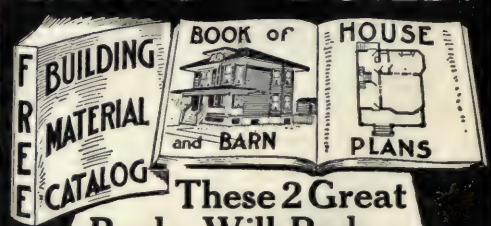
For second and other coats succeeding the priming coat use a rather stout paint, one that will admit of considerable rubbing out. A paint too thin to allow of this is not a good paint. A white, dead-flat job requires smooth work from start to finish. Careful brush work will greatly facilitate this.

"The Building Of It"

A Practical Handbook on Construction Details, \$1.

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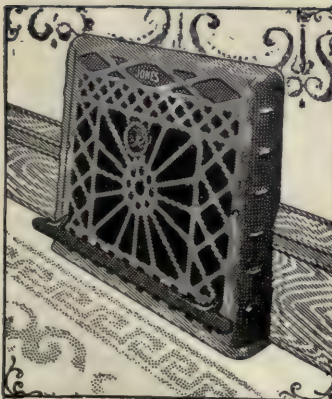
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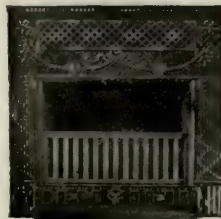
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Heating, Lighting and Plumbing

How to Heat Water for Household Use.

By Charles K. Farrington.



HERE are four methods of heating water for use in the household which have found favor. They are:

No. 1—By a water back in a coal range.

No. 2—By a gas heater attached to the ordinary kitchen range boiler.

No. 3—By the automatic heaters operated by gas.

No. 4—By a "water back," or heater, placed in furnace of the house.

Plan No. 1 is too well known to require any extended description, and where a coal range is employed it is largely used, but the advent of the gas range, now so widely used, especially in the summer time, has caused plan No. 2 to come into favor. In this arrangement a small gas heater is placed alongside the ordinary kitchen hot water boiler, and when hot water is required the gas is lit. Such a heater costs about \$14 for a size to heat properly the water in a forty to fifty-gallon boiler, the price being for it installed, ready to work. A number of reliable companies make these heaters and they will give satisfaction. Very careful tests were made under the writer's supervision to determine the amount of time it was necessary to keep the gas burning in order to obtain sufficient hot water for various household needs. I will mention the results, as they will be of service to many householders:

To heat the water for the laundry work of four persons, the gas was burned for one hour; cost, five cents.

To heat the water for a bath, gas burned twelve minutes; cost, one cent.

To heat the water for dish washing, gas burned five minutes; cost, less than one-half cent.

These calculations were based on a

cost of \$1 for 1,000 feet of artificial gas, this price being the average charged throughout the country for manufactured gas. It should be remembered in this connection that all the water in the kitchen boiler does not have to be heated before any hot water can be obtained. The heated water rises to the top of the boiler and may be drawn off as it is required, while the water in the bottom part of the boiler remains unheated. This is often not known by the housewife. Such a heater gives no trouble when operating, all that has to be done to make it operate being to turn on and light the gas, and to turn it off when sufficient water has been heated. Used in connection with a gas stove for cooking, this device allows the kitchen to be kept cool during the summer months, and the tidy housewife will rejoice at the absence of ashes, for ashes are always present with a coal range. There are people who do not know the advantages of heaters of this description, and who therefore still use a coal range largely in order to be able to obtain hot water, in spite of the discomforts of so doing. The third method has proven very satisfactory. In this system no hot water is stored, the water being heated only as it is required. A heater is placed in the cellar, and all that one has to do to obtain hot water at any time, day or night, is to turn on the faucet. No change of existing piping is necessary; the heaters are readily applied to any in use. For an average-sized house the cost of one of these heaters installed ready to operate will be approximately \$90 to \$95. The heaters are manufactured by reliable companies, and with the usual price I mentioned for artificial gas, i. e., \$1 per 1,000 feet, hot water may be obtained, approximately, seven gallons for one cent. For homes where hot water is required at any time, day or night, these heaters

THERE'S ANOTHER THING

about the **Hess Welded Steel Furnace** that is different from other furnaces, and that is the matter of regulation. Regulation means the controlling of air drafts through the fuel or through the furnace, so that the combustion is controlled. When a furnace is made of steel and cast iron, or of cast iron alone, or of steel alone, (unless the seams are welded), it is impossible to make joints that are *ever-lastingly tight*. The expansion and contraction of heat will distort the parts and there is no cement made which will expand and contract with the metal and hold the joint against leakage. Steel and cast iron do not expand uniformly with heat, and will buckle apart from each other, and steel alone, without welding, will not stay together tight enough to prevent escape of gas and leakage of air.

There is always some leakage of air *into* the furnace, or of gas and dust *out* of the furnace, that is sure to interfere with the regulation or control. The crevices may be small, but they will let in enough air so that your control of the fire is not perfect. Then you lose fuel through combustion which is too rapid, or the leakage about the fire cools your furnace slightly and prevents the good, steady flow of air through the fire, which is necessary to success.

The leakage of dust and gas *out* of the furnace and the hot air pipes is so common that some people hold it against all kinds of furnaces.

In the **WELDED STEEL FURNACE** which we make, *every seam is permanently and absolutely tight*; the steel parts are **MELTED TOGETHER** like one piece of steel. Regulation is easy and the furnace is always under exact control. No dirt can come from the furnace and your house and furniture are always free from furnace dust.

This space won't allow for a longer account, but if you will drop a card and ask for our booklet which tells all about it, and how we sell on trial, *direct from factory to consumer*, and save you a lot of money, you will then get full information that will be valuable to you. Send a sketch of your house and we'll mail you a blue print with the heating system laid out, and an estimate of cost. No charge; no obligation.

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HEATING, LIGHTING AND PLUMBING—Continued

are very convenient. Method No. 4 has lately come into use, and is excellent for special purposes. A heater is placed in the furnace and supplies hot water to the kitchen range boiler and other points in addition, as will be noted later in this article. No expensive system of piping is therefore required, only that from the furnace to the kitchen boiler. It should be remembered in this connection that even in the latitude of New York City, furnaces are kept burning from November 1st to April 1st, or sometimes even longer. Therefore, for nearly one-half the entire year there is a fire in the cellar. So the furnace fire, which has to be kept burning, can be made to supply hot water for the kitchen, bathroom, butler's pantry, etc., in addition to heating the entire house. These devices, which resemble an ordinary water back, as applied to the usual kitchen coal range, can be put in any furnace, whether it be a steam, hot air, or hot water one, which the householder may have already installed in the house, therefore it is not

necessary to outlay much money. Fifteen dollars will cover the cost of the device, installed, ready to operate. With such a heater, and a gas range in the kitchen for cooking purposes, it is possible to dispense with the usual coal range and water back for six months or so during the year, and if a small gas heater for the boiler (such as was described in method No. 2) is employed for the other six months, it will be entirely practicable not to ever have a coal range in operation, and so to be free from dirt and ashes the year round, and, last but not least by any means, excessive heat in summer time, for much heat is always present when a coal range is used. And what a comfort it will be to the average housewife to have only one fire to attend to in the winter, and that fire right in the cellar, with the coal supply directly at hand, and no coal to be carried upstairs to the kitchen range. It will pay to investigate carefully method No. 4. Any plumber can install the necessary piping.

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SPLINTERS AND SHAVINGS

A Building Estimate.

What Is the Contractors' Guarantee Worth?

Labor and Material Liens.



PLACING a building contract with the lowest bidder may seem to many a good stroke of business and a money saver.

Many home builders can testify that on the contrary it has been a very costly experiment. Lot owners deciding to build, should first inform themselves on the building laws and the obligations they assume when letting a building contract to an irresponsible person. They would learn that if any labor remains unpaid, also building material used in the construction of the house, that labor and material liens will compel them to pay the same or their lot and the house will be sold to satisfy the liens.

It makes no difference if the builder has already received the full sum that he contracted to build the house for—the owner must pay all unpaid labor and material bills. Common sense and good business judgment should prove to every one that when an irresponsible builder or carpenter who works for wages, offers to build a \$5,000 to \$6,000 home for \$1,500 less than a large successful building company, there is something wrong some place.

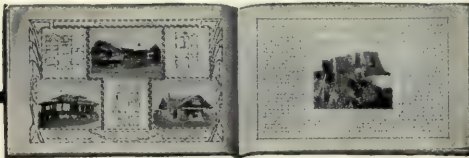
The irresponsible builder has nothing to lose and is always assured of good wages and a good profit. He can name almost any price to secure the job and put it so low that no responsible concern can compete. All he wants is the contract. He can soon get enough cash advanced to take care of his profit and wages.

If, before the house is completed the lot owner finds that he has already paid out as much as the finished house was to cost him, the shoe string contractor explains that he made a mistake in estimating—forgot to figure the doors or the windows or an entire floor, etc.—that no one could build a house for that price and that he will do his best to complete it as cheap as possible. If the owner turns it over to someone else it would cost him still more money.

The lot owner has absolutely no recourse and protection, for the builder has no financial responsibility and is practically judgment proof. Consequently he is compelled to put up the necessary additional money to complete the job and the \$3,500 house costs \$6,000 and is perhaps a poor job at that.

The only way that a home builder can protect himself against these irresponsible contractors who explain their ability to figure so low a price because of their having no over-head expenses, etc., is by demanding a "builders bond." This would promptly eliminate this class of bidders and if the bond is furnished, it will protect the home builder against liens of any kind and would guarantee him the fulfillment of the contract as per specifications for the stipulated price.

It is therefore of the utmost importance that everyone who desires to erect a building of any kind on a lot owned by himself, that he demand a building bond from any contractor of whose financial standing he is not absolutely sure.



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New Booklets and Trade Notes



MID the blowing of trumpets by the brick and cement people we sometimes get the clear, small voice of the wood builders, or rather those who are quietly still sawing wood and furnishing goodly quantities of it to the building public.

An instructive little booklet is issued by the Arkansas Soft Pine Bureau, Chicago, Ill., which gives some interesting and illuminating facts on the use of wood in building which will prove a surprise to those who have not given the subject attention. We recommend our readers to send for this booklet, "How to Build," and assure them it is worth reading.

While we are on the subject of wood, we wish also, to call attention to the comprehensive booklet issued by the Oak Flooring Bureau, Detroit, Mich., which not only tells why, when and how to use oak flooring but how to finish and take care of it afterward.

* * *

The Acme Roofing Tile Co., manufacturers of promenade and roofing tile, Des Moines, Ia., sent out a very unique booklet which cannot fail to attract attention, and that is certainly one point gained. The cover of this large booklet is a sheet of brilliant orange color with a stork in black hovering in air and bearing the card of the Acme Roofing Tile Co. to the manufacturing plants below. The booklet is titled "*A New Arrival*," in black lettering.

* * *

We have an interesting booklet from the North Western Expanded Metal Company, Chicago, Ill., entitled "Concrete Culverts" — reinforced with "Econo." The booklet shows many full-page illustrations of concrete culverts in different sections of the country where this method of construction has been used. As its name suggests, the special advantage of "Econo" reinforcement is the saving in time and the certainty of ordering the correct amount of reinforcement.

The "Spectrum" for September is unusually attractive in its deep blue cover with the famous Woolworth building, New York, looming up in white, against the blue. It contains also a very charming decorative scheme for a dining room in white, gray and green, in which the fad for enameled furniture in colors is introduced most agreeably. A mounted proof of this color plate is sent free on request.

* * *

"Sunlight" is the attractive booklet issued by the Sunlight Double Glass Sash Co., Louisville, Ky., which will be of special interest to our gardeners and outdoor enthusiasts. "Sunlight" will give them many practical suggestions and is a wide awake and up-to-date booklet.

* * *

An attractive booklet comes to us from the Thomas Moulding Brick Co., Chicago, on brick fireplaces. The brownish-grey mottled cover with red lettering, is in artistic keeping with the subject-matter of the booklet, which contains many full page illustrations in color of special fireplace designs by these manufacturers of high class brick fireplaces. Floor plans for setting up and over-all heights are given under each illustration and drawings are furnished with the mantels which give construction details, and instructions as to composition of mortar and size and style of joint. The architectural effects while new, are in good taste.

* * *

Two new candidates for favor in the painting world are "Sani-Flat" a flat oil paint for interior wall decoration or woodwork, and "Mooramel," a pure white porcelain-like enamel for either walls or woodwork. These are the products of the Benjamin Moore Co., New York, and their very attractive booklets show color samples of new shades and velvety finish in the Sani-Flat. The new tones of grey and green being specially noticeable.

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Keith's magazine on home
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